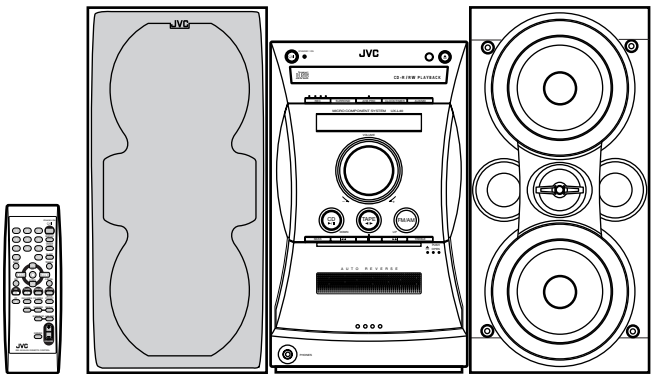
JVC

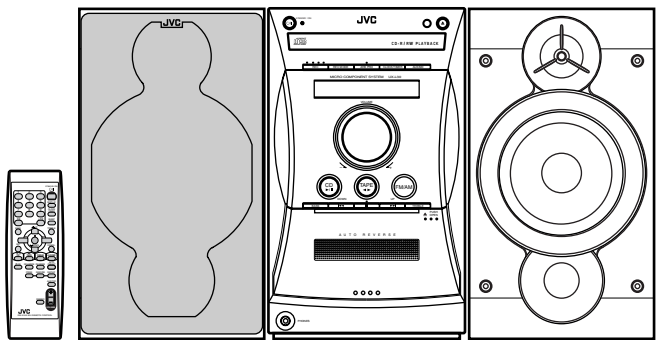
SERVICE MANUAL

MICRO COMPONENT SYSTEM

UX-L40/UX-L30



SP-UXL40 CA-UXL40 SP-UXL40



SP-UXL30 CA-UXL30 SP-UXL30

UX-L40
Area Suffix
US ---------- Singapore
UP ---------- Korea
UW ------- Brazil,Mexico,Peru

COMPACT disc DIGITAL AUDIO

UX-L30
Area Suffix
US ---------- Singapore
UP ---------- Korea
UW ------- Brazil,Mexico,Peru
UJ ---------- U.S.Military

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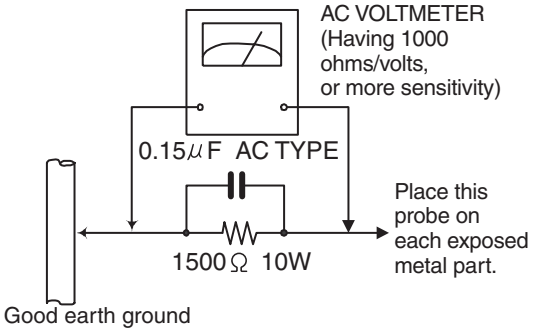
No.21105
Jul. 2002

Safety Precautions

1. This design of this product contains special hardware and many circuits and components specially for safety purposes. For continued protection, no changes should be made to the original design unless authorized in writing by the manufacturer. Replacement parts must be identical to those used in the original circuits. Services should be performed by qualified personnel only.
2. Alterations of the design or circuitry of the product should not be made. Any design alterations of the product should not be made. Any design alterations or additions will void the manufacturer`s warranty and will further relieve the manufacture of responsibility for personal injury or property damage resulting therefrom.
3. Many electrical and mechanical parts in the products have special safety-related characteristics. These characteristics are often not evident from visual inspection nor can the protection afforded by them necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in the Parts List of Service Manual. Electrical components having such features are identified by shading on the schematics and by (⚠) on the Parts List in the Service Manual. The use of a substitute replacement which does not have the same safety characteristics as the recommended replacement parts shown in the Parts List of Service Manual may create shock, fire, or other hazards.
4. The leads in the products are routed and dressed with ties, clamps, tubings, barriers and the like to be separated from live parts, high temperature parts, moving parts and/or sharp edges for the prevention of electric shock and fire hazard. When service is required, the original lead routing and dress should be observed, and it should be confirmed that they have been returned to normal, after re-assembling.
5. Leakage currnet check (Electrical shock hazard testing)
   After re-assembling the product, always perform an isolation check on the exposed metal parts of the product (antenna terminals, knobs, metal cabinet, screw heads, headphone jack, control shafts, etc.) to be sure the product is safe to operate without danger of electrical shock.
   Do not use a line isolation transformer during this check.
   - Plug the AC line cord directly into the AC outlet. Using a "Leakage Current Tester", measure the leakage current from each exposed metal parts of the cabinet, particularly any exposed metal part having a return path to the chassis, to a known good earth ground. Any leakage current must not exceed 0.5mA AC (r.m.s.).
   - Alternate check method
     Plug the AC line cord directly into the AC outlet. Use an AC voltmeter having, 1,000 ohms per volt or more sensitivity in the following manner. Connect a 1,500Ω 10W resistor paralleled by a 0.15μF AC-type capacitor between an exposed metal part and a known good earth ground. Measure the AC voltage across the resistor with the AC voltmeter.
     Move the resistor connection to each exposed metal part, particularly any exposed metal part having a return path to the chassis, and meausre the AC voltage across the resistor. Now, reverse the plug in the AC outlet and repeat each measurement. Voltage measured any must not exceed 0.75 V AC (r.m.s.). This corresponds to 0.5 mA AC (r.m.s.).



Warning

1. This equipment has been designed and manufactured to meet international safety standards.
2. It is the legal responsibility of the repairer to ensure that these safety standards are maintained.
3. Repairs must be made in accordance with the relevant safety standards.
4. It is essential that safety critical components are replaced by approved parts.
5. If mains voltage selector is provided, check setting for local voltage.

⚠ CAUTION

Burrs formed during molding may be left over on some parts of the chassis. Therefore, pay attention to such burrs in the case of preforming repair of this system.

In regard with component parts appearing on the silk-screen printed side (parts side) of the PWB diagrams, the parts that are printed over with black such as the resistor (▬), diode (▮) and ICP (●) or identified by the "⚠" mark nearby are critical for safety.

(This regulation does not correspond to J and C version.)

Preventing static electricity

1.Grounding to prevent damage by static electricity

Electrostatic discharge (ESD), which occurs when static electricity stored in the body, fabric, etc. is discharged, can destroy the laser diode in the traverse unit (optical pickup). Take care to prevent this when performing repairs.

2.About the earth processing for the destruction prevention by static electricity

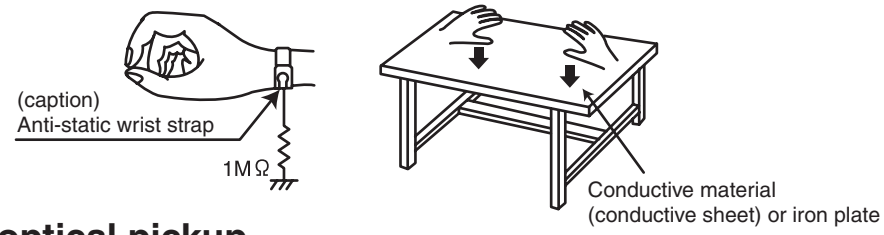
Static electricity in the work area can destroy the optical pickup (laser diode) in devices such as CD players. Be careful to use proper grounding in the area where repairs are being performed.

2-1 Ground the workbench

Ground the workbench by laying conductive material (such as a conductive sheet) or an iron plate over it before placing the traverse unit (optical pickup) on it.

2-2 Ground yourself

Use an anti-static wrist strap to release any static electricity built up in your body.



3. Handling the optical pickup

1. In order to maintain quality during transport and before installation, both sides of the laser diode on the replacement optical pickup are shorted. After replacement, return the shorted parts to their original condition. (Refer to the text.)

2. Do not use a tester to check the condition of the laser diode in the optical pickup. The tester's internal power source can easily destroy the laser diode.

4.Handling the traverse unit (optical pickup)

1. Do not subject the traverse unit (optical pickup) to strong shocks, as it is a sensitive, complex unit.

2. Cut off the shorted part of the flexible cable using nippers, etc. after replacing the optical pickup. For specific details, refer to the replacement procedure in the text. Remove the anti-static pin when replacing the traverse unit. Be careful not to take too long a time when attaching it to the connector.

3. Handle the flexible cable carefully as it may break when subjected to strong force.

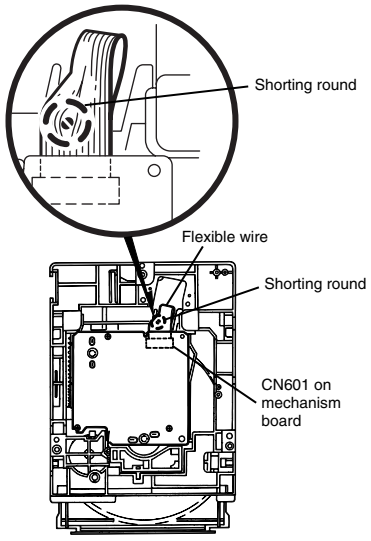
4. It is not possible to adjust the semi-fixed resistor that adjusts the laser power. Do not turn it

Attention when traverse unit is decomposed

***Please refer to "Disassembly method" in the text for pick-up and how to detach the substrate.**

1.Solder is put up before the card wire is removed from connector on the CD substrate as shown in Figure.
(When the wire is removed without putting up solder, the CD pick-up assembly might destroy.)

2.Please remove solder after connecting the card wire with when you install picking up in the substrate.



Important for laser products

1.CLASS 1 LASER PRODUCT

2.DANGER : Invisible laser radiation when open and inter lock failed or defeated. Avoid direct exposure to beam.

3.CAUTION : There are no serviceable parts inside the Laser Unit. Do not disassemble the Laser Unit. Replace the complete Laser Unit if it malfunctions.

4.CAUTION : The compact disc player uses invisible laserradiation and is equipped with safety switches whichprevent emission of radiation when the drawer is open and the safety interlocks have failed or are de feated. It is dangerous to defeat the safety switches.

5.CAUTION : If safety switches malfunction, the laser is able to function.

6.CAUTION : Use of controls, adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

⚠ ***CAUTION*** **Please use enough caution not to see the beam directly or touch it in case of an adjustment or operation check.**

VARNING : Osynlig laserstrålning är denna del är öppnad och spårren är urkopplad. Betrakta ej strålen.

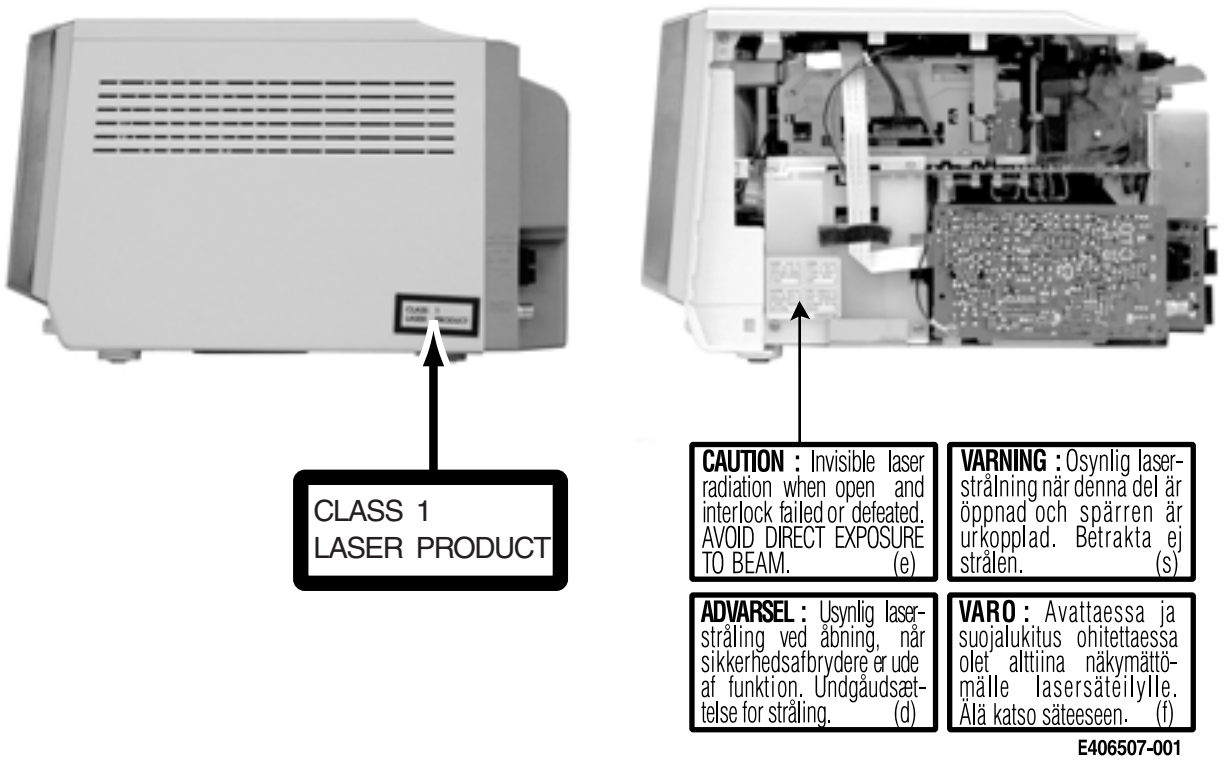
VARO : Avattaessa ja suojalukitus ohitettaessa olet alttiina näkymättömälle lasersäteilylle.Älä katso säteeseen.

ADVARSEL : Usynlig laserstråling ved åbning , når sikkerhedsafbrydere er ude af funktion. Undgå udsættelse for stråling.

ADVARSEL : Usynlig laserstråling ved åpning,når sikkerhetsbryteren er avslott. unngå utsettelse for stråling.

REPRODUCTION AND POSITION OF LABELS

WARNING LABEL


CLASS 1
LASER PRODUCT
CAUTION : Invisible laser radiation when open and interlock failed or defeated. AVOID DIRECT EXPOSURE TO BEAM. (e)
VARNING : Osynlig laserstrålning när denna del är öppnad och spärren är urkopplad. Betrakta ej strålen. (s)
ADVARSEL : Usynlig laserstråling ved åbning, når sikkerhedsafbrydere er ude af funktion. Undgåudsættelse for stråling. (d)
VARO : Avattaessa ja suojalukitus ohitettaessa olet alttiina näkymättömälle lasersäteilylle. Älä katso säteeseen. (f)
E406507-001

Disassembly method

<Main body>

■ Removing the Metal cover

(See Fig.1 to 3)

1. Remove the six screws **A** on the back of the main body.
2. Remove the screw **B** on each side and remove the cover in the direction of the arrow.

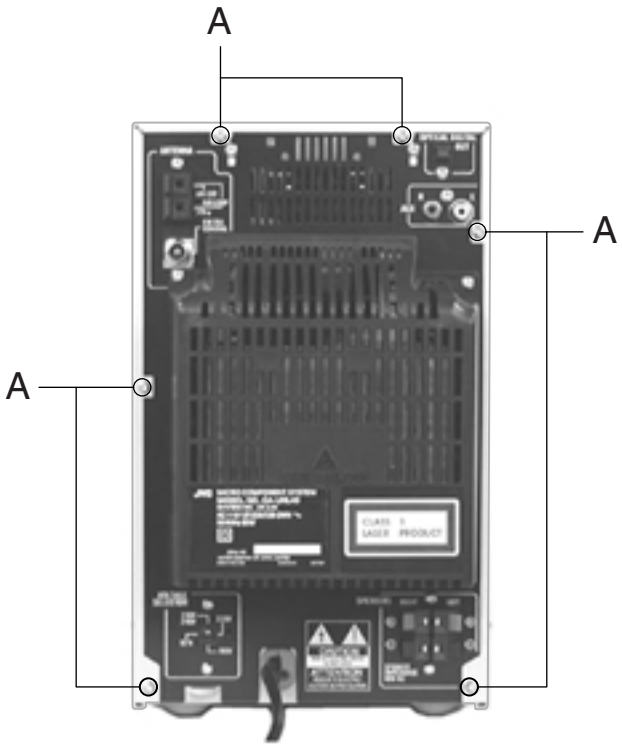


Fig.1

Fig.3

Fig.2

■ Removing the Rear cover

(See Fig.4)

・ Remove the metal cover.

1. Remove the two screws **C** retaining the rear cover.

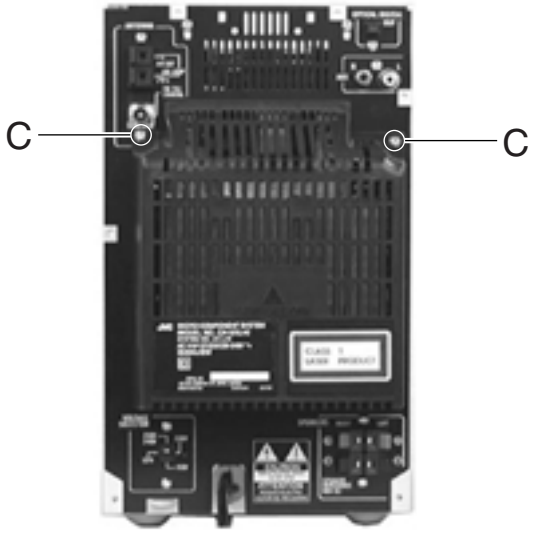


Fig.4

■ Removing the Rear panel

(See Fig.5)

・ Remove the metal cover and the rear cover.

1. Remove the twelve screws **D** retaining the rear panel. Release the two joints **a** on the rear side and the joint **b** on each side.

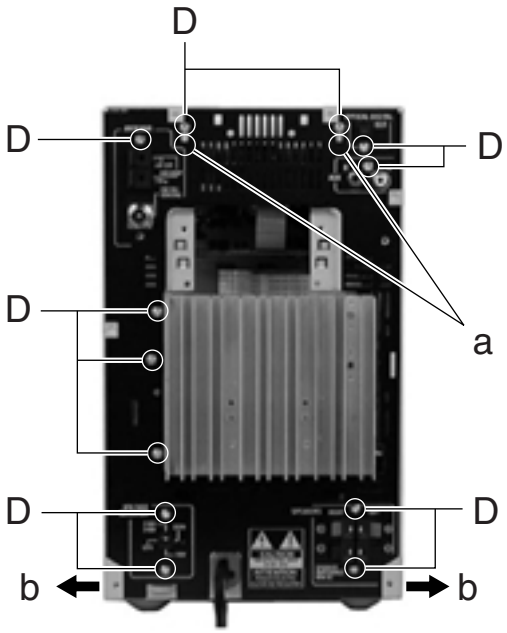


Fig.5

■ Removing the Tuner board

(See Fig.6)

・ Remove the metal cover.

1. Disconnect the card wire from connector CN1 on the tuner board.

2. Remove the two screws **E** on the rear side and the screw **F** on the side.

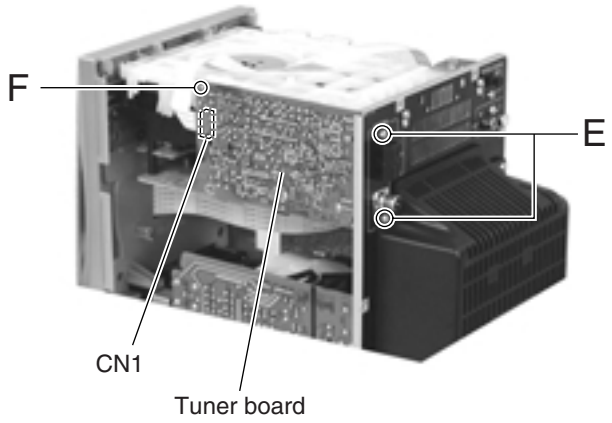


Fig.6

■ Removing the Optical digital board

(See Fig.7)

・ Remove the metal cover.

1. Disconnect the shield wire from connector CN905 on the optical digital board.

2. Remove the screw **G** on the rear side and the screw **H** on the upper side.

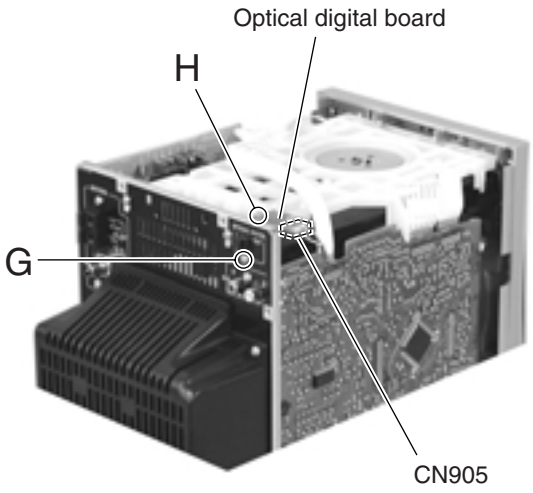


Fig.7

■ Removing the CD-R/RW mechanism assembly (See Fig.8)

- Remove the metal cover, the rear cover, the rear panel, the tuner board and the optical digital board.

1. Disconnect the card wire from connector CN903 and CN904 on the main board.

2. Pull the joint **c** in the direction of the arrow and remove the CD-R/RW mechanism assembly backward while releasing the joint **d**.

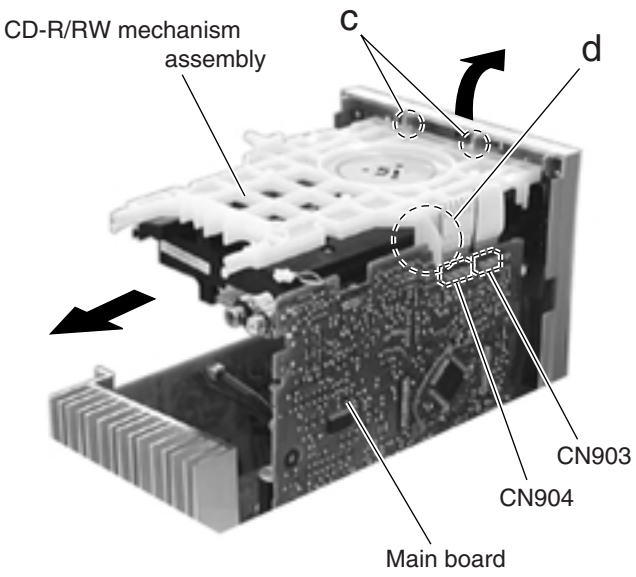


Fig.8

■Removing the Main board/ the Heat sink board (See Fig.9 to 11)

・ Remove the metal cover, the rear cover and the rear panel.

1. Disconnect the card wire from connector CN902, CN903, CN904 and CN905 on the main board and remove the CD-R/RW mechanism assembly.

REFERENCE: Refer to the method of removing the CD-R/RW mechanism assembly and Fig.8.

2. Remove the two screws **l** to remove the main board.

3. Disconnect the card wire from connector CN931, CN935, CN933, CN934, CN913, CN901, CN900 and CN917 on the main board.

4. Remove the band **f** and disconnect the card wire from connector CN951 on the power transformer assembly. Remove the main board / the heat sink board from the body.

5. Release the joint **e** of the main board and disconnect connector CN944 and CN945 of the heat sink board from connector CN915 and CN916 of the main board respectively.

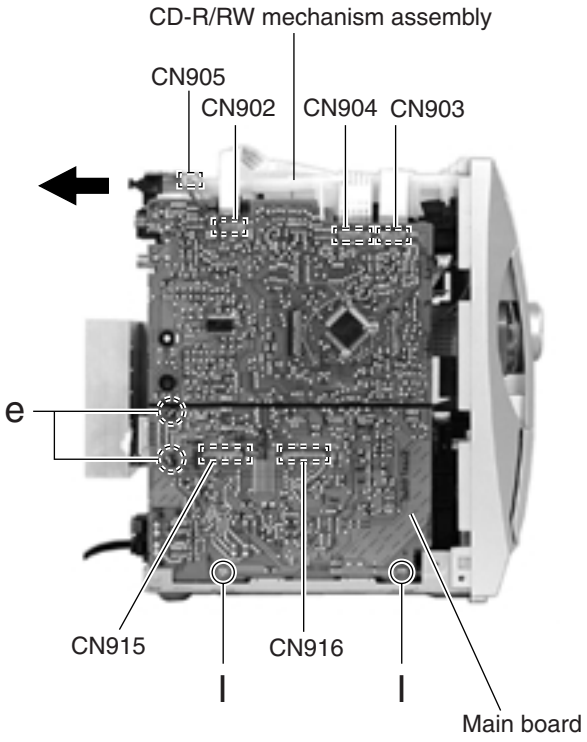


Fig.9

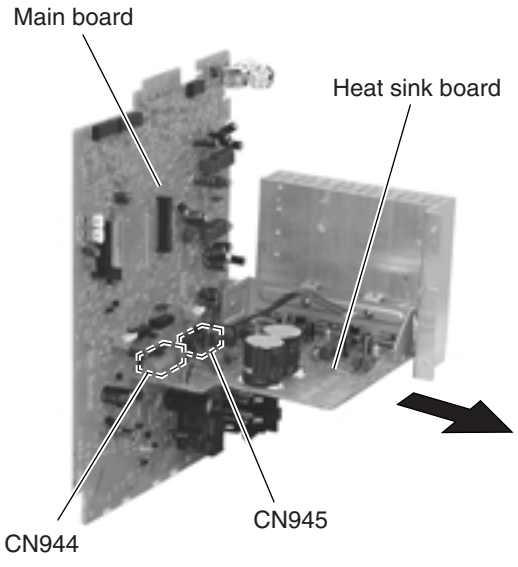


Fig.11

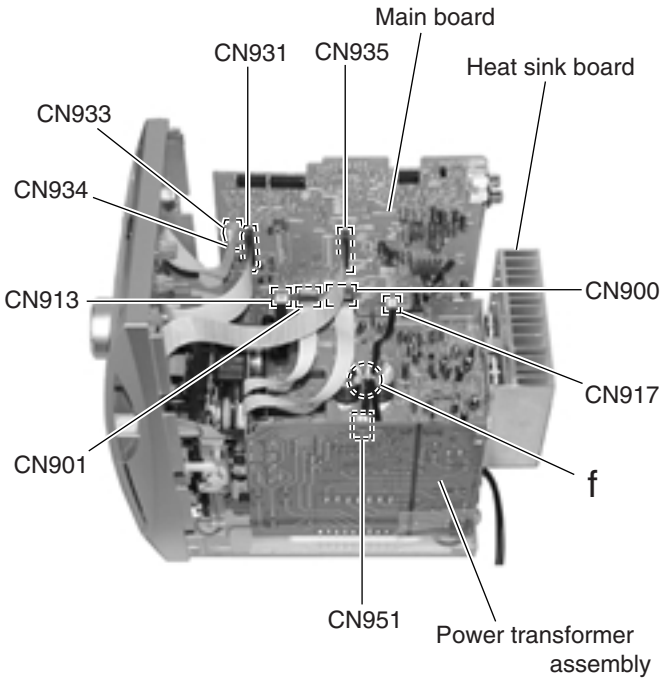


Fig.10

■Removing the Power transformer assembly (See Fig.12)

- Remove the metal cover, the rear cover, the rear panel, the CD-R/RW mechanism assembly and the main board.

1. Disconnect the power cord from connector J1000 on the power transformer assembly.

2. Remove the four screws **J**.

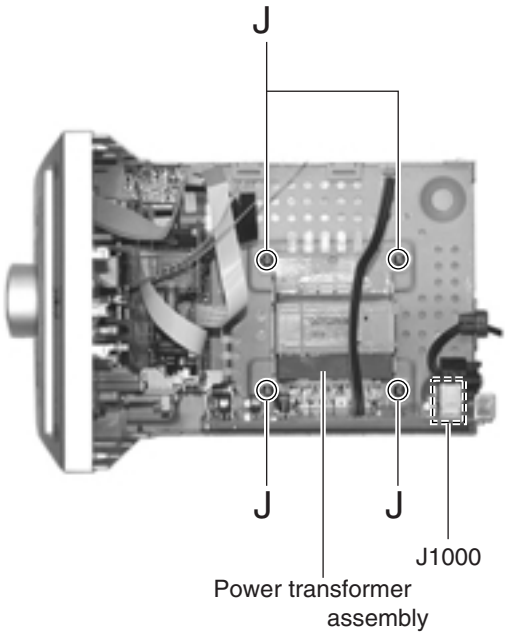


Fig.12

■ Removing the Front panel assembly (See Fig.13 to 16)

- Remove the metal cover.

1. Remove the screw **K** on each side. Pull the joint **h** on both sides and lift the front panel assembly to release the joint **g**.

2. Disconnect connector CN931, CN935, CN933 and CN934 on the main board.

3. Disconnect the card wire from connector CN33 and CN34 on the cassette mechanism board.

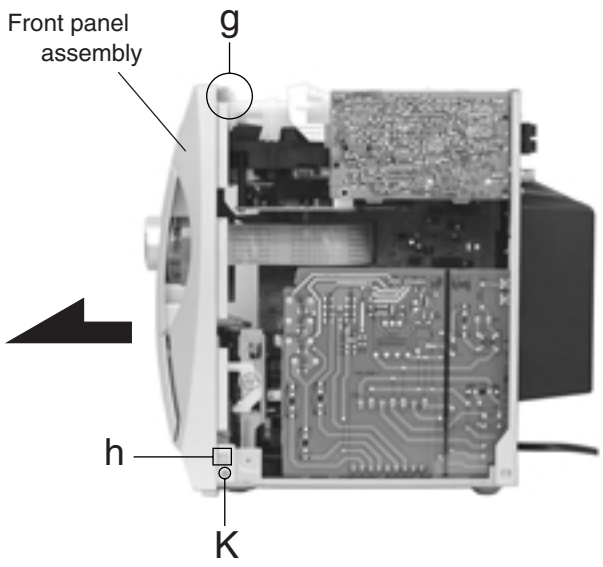


Fig.13

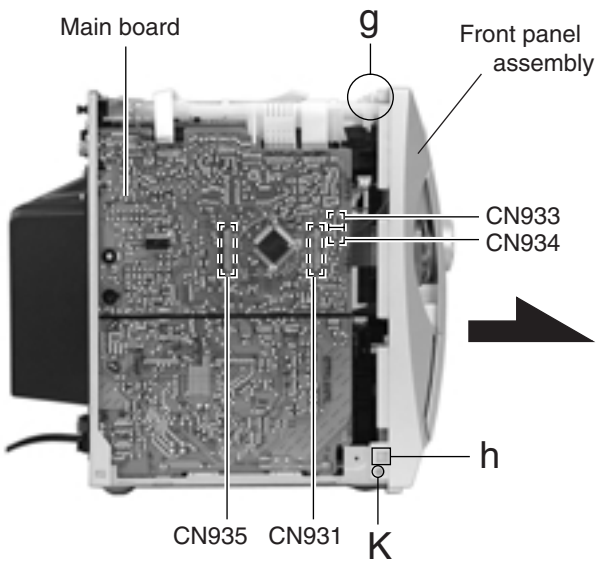


Fig.14

Fig.15

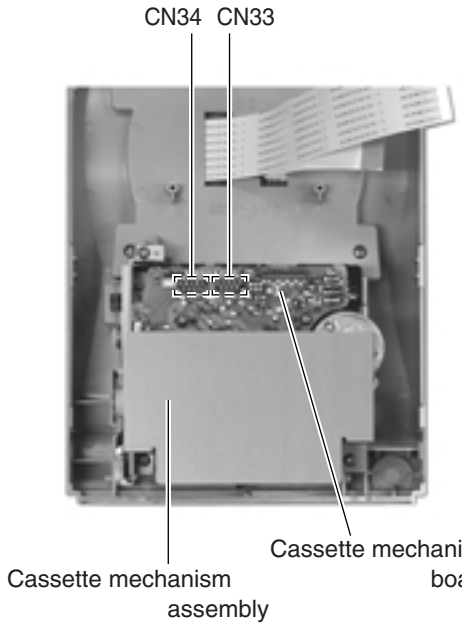


Fig.16

■Removing the Phones board (See Fig.17)

・ Prior to performing the following procedure, remove the metal cover and the front panel assembly.

1. Disconnect connector CN913 on the main board.

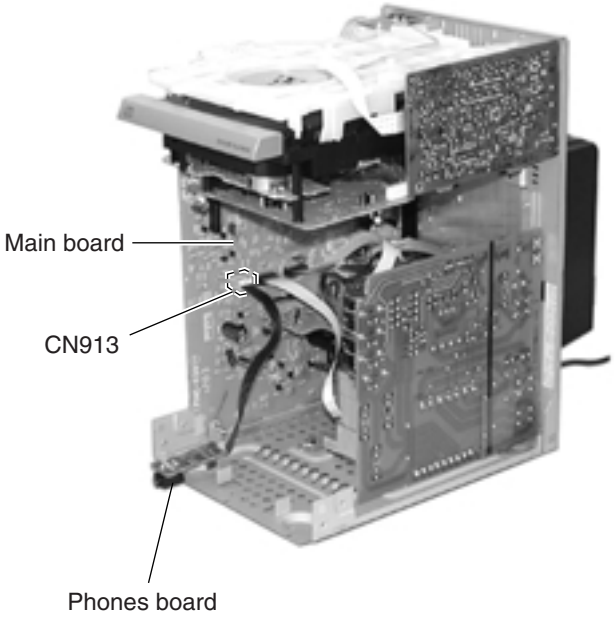


Fig.17

■Removing the Cassette mechanism assembly (See Fig.18)

・ Prior to performing the following procedure, remove the metal cover and the front panel assembly.

1. Remove the four screws **L** retaining the cassette mechanism assembly.

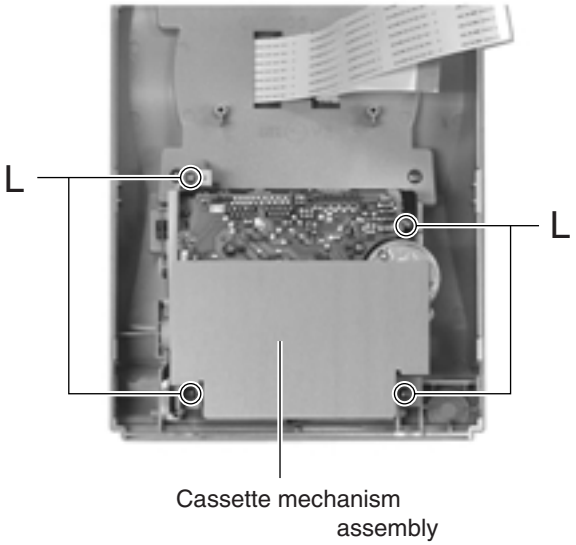


Fig.18

■ Removing the Control board

(See Fig.19)

- Prior to performing the following procedure, remove the metal cover and the front panel assembly.

1. Remove the seven screws **M** to remove the control board.

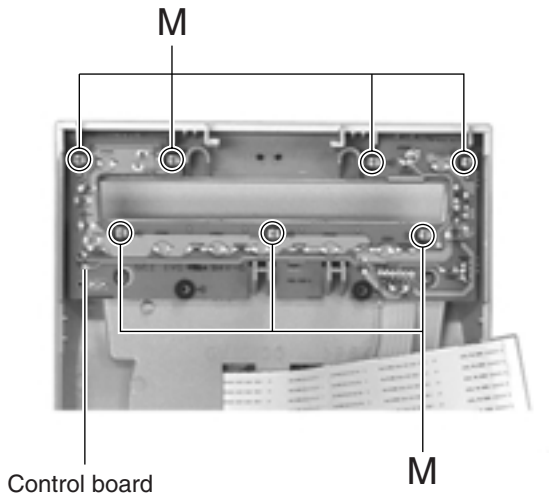


Fig.19

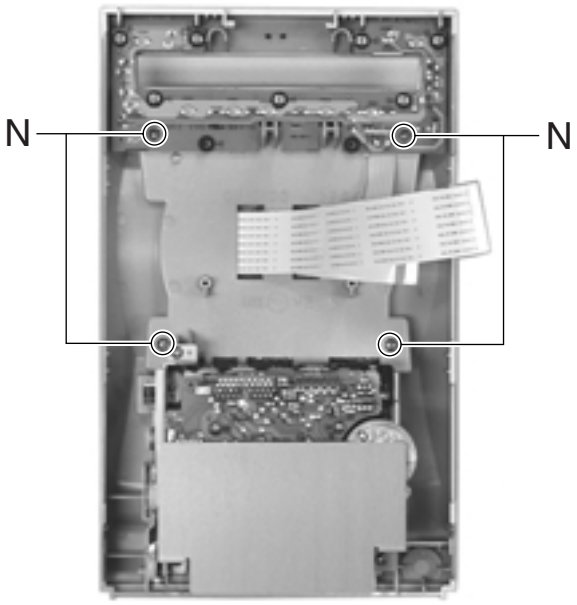


Fig.20

■ Removing the Volume board

(See Fig.20 and 21)

- Prior to performing the following procedure, remove the metal cover and the front panel assembly.

1. Remove the four screws **N** attaching the volume panel on the front panel assembly.

2. Remove the six screws **O** attaching the volume board on the volume panel, and remove the volume board.

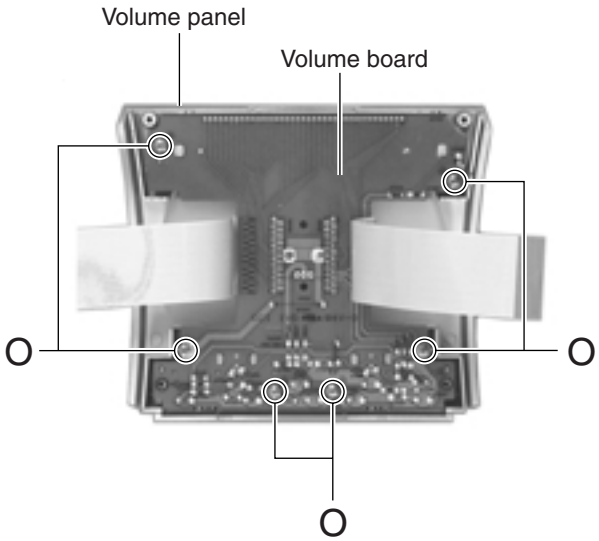


Fig.21

<CD mechanism assembly section>

■ Removing the CD servo board (See Fig.1, 2)

CAUTION: Solder the shorting round before disconnecting the card wire extending from the pickup. If you do not follow this instruction, the pickup may be damaged.

1. Remove the two screws **A** on the bottom of the loading base.
2. Disconnect the card wire from connector CN606 on the CD servo board. Turn over the CD servo board as shown in Fig.2 and put aside temporarily.
3. Solder the shorting round on the pickup board in the CD pickup section.
4. Disconnect the card wire from connector CN601 and the wire from CN801 on the CD servo board.

CAUTION: When reassembling, make sure to unsolder the shorting round after connecting the card wire from the pickup to the connector.

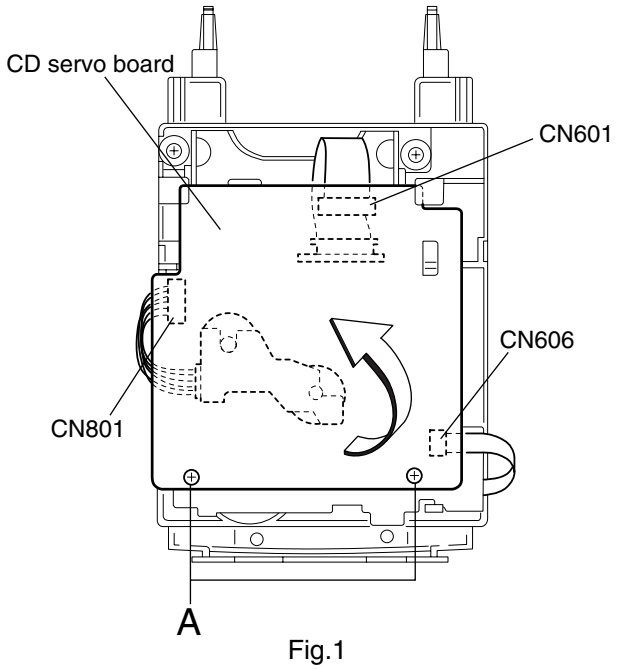


Fig.1

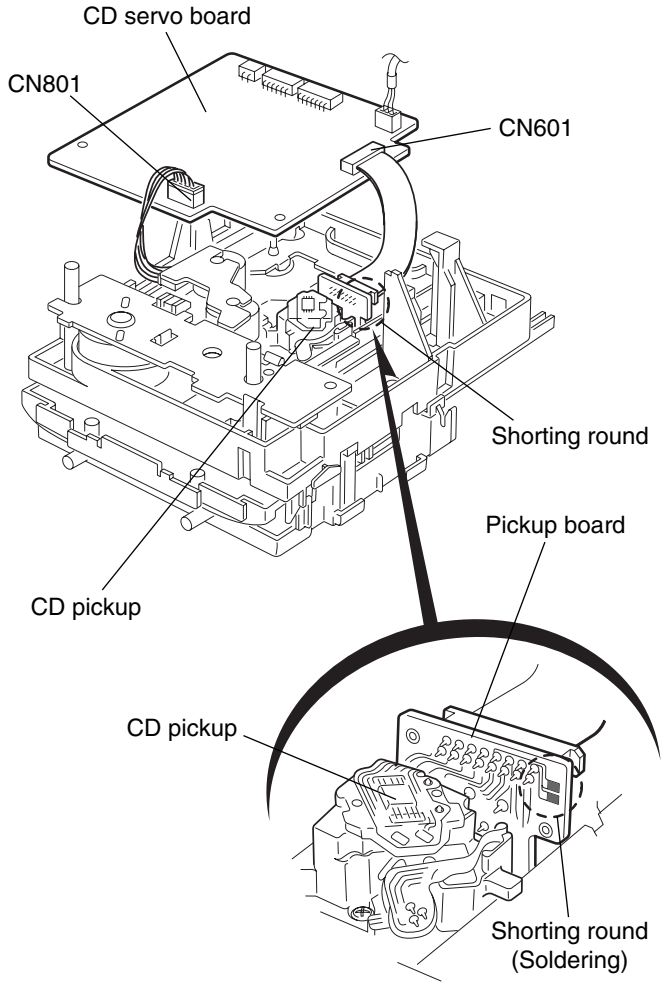


Fig.2

■ Removing the clamper base / tray (See Fig.3 ~ 5)

1. Bring up the fitting in the direction of the arrow to release the three joints **a**.
2. On the front side of the body, move the cam plate lever to the center.
3. Remove the stopper screw **B** and pull out the tray toward the front.
4. Remove the four screws **C** attaching the clamper base.
5. From the rear side, remove the clamper base upward.

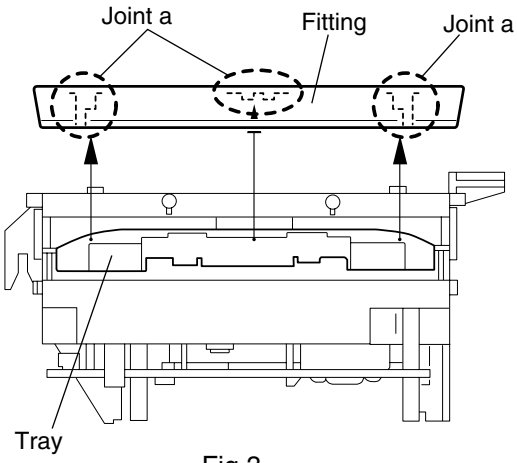


Fig.3

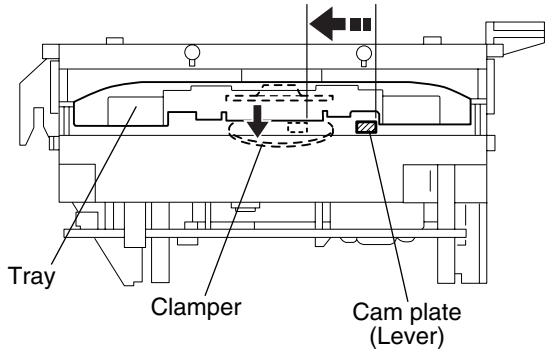


Fig.4

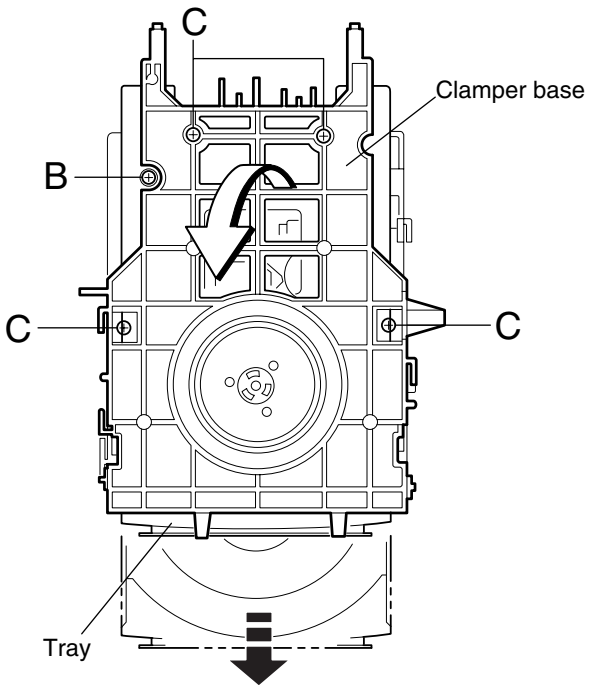


Fig.5

■Removing the CD mechanism assembly (See Fig.6, 7)

・ Prior to performing the following procedure, remove the clamper base / tray and the CD servo board.

1. Remove the screw **D** attaching the CD mechanism assembly.

2. Move the CD mechanism assembly backward to release the two joints **b** of the CD base on the front side.

CAUTION: When reassembling, fit the front part of the CD mechanism assembly to the two chassis joints **b** and attach the four dampers correctly.

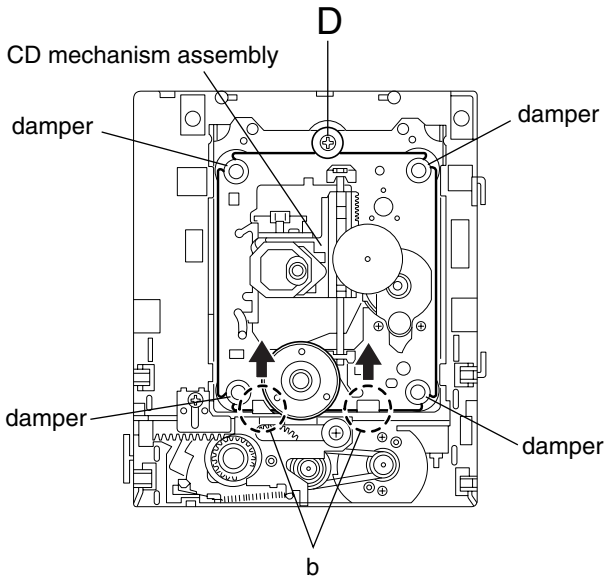


Fig.6

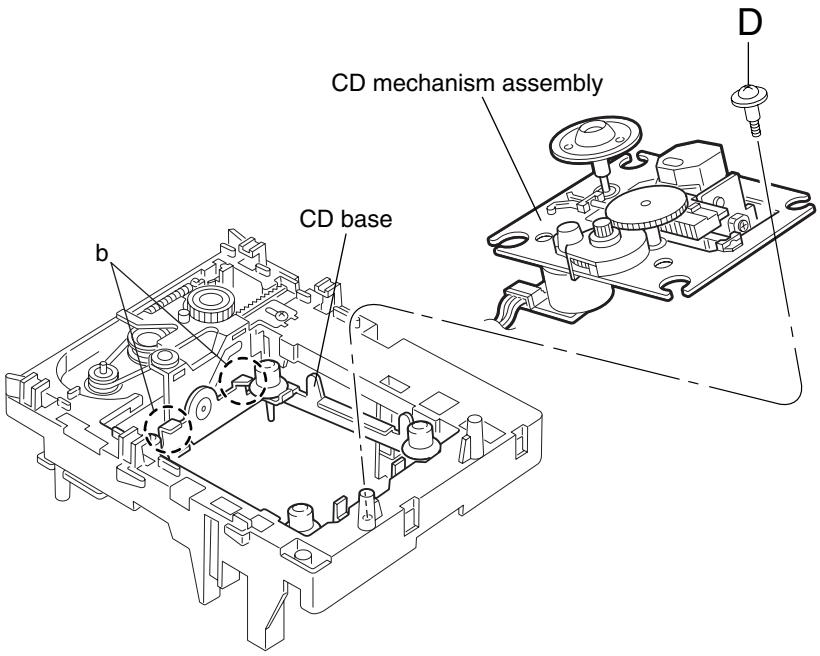


Fig.7

■ Removing the loading motor / loading motor board (See Fig.8, 9)

・ Prior to performing the following procedure, remove the clamper base / tray and the CD servo board.

1. From upside of the loading base, remove the belt from the motor pulley.

2. Remove the two screws **E** attaching the loading motor.

3. At the bottom of the body, release the three joints **c** outward and pull out the loading motor board from the shaft. The loading motor comes off with the loading board.

4. Unsolder the two soldered points **d** on the loading motor board and remove the loading motor.

REFERENCE: When removing the loading motor board only, unsolder the two soldering **d** on the loading motor and release the three joints **c**.

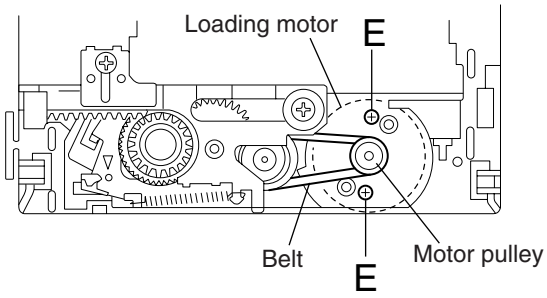


Fig.8

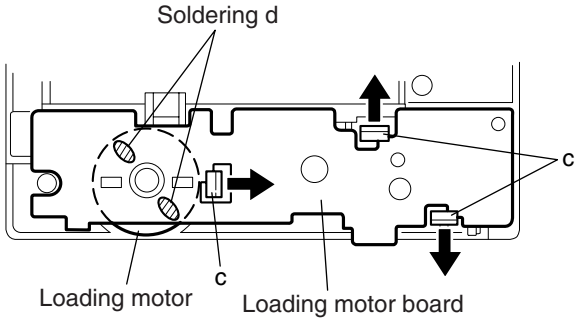


Fig.9

■ Removing the C.D. gear (1), (2) and (3) (See Fig.10 ~ 13)

・ Prior to performing the following procedure, remove the CD servo board.

1. Remove the two screws **F** attaching the CD base on the bottom of the loading base.

2. Remove the rear part of the CD base upward and pull out the shaft **e** of the CD base from the camplate on the front side of the loading base.

REFERENCE: The CD mechanism assemly comes off with the CD base.

3. Remove the leaf spring on the upside of the loading base.

4. Remove the screw **G** attaching the cam plate fitting.

5. Remove the screw **H** and the cam plate upward.

6. Remove the belt from the C.D. gear (1).

7. Pull out the C.D. gear (1), (2) and (3) respectively.

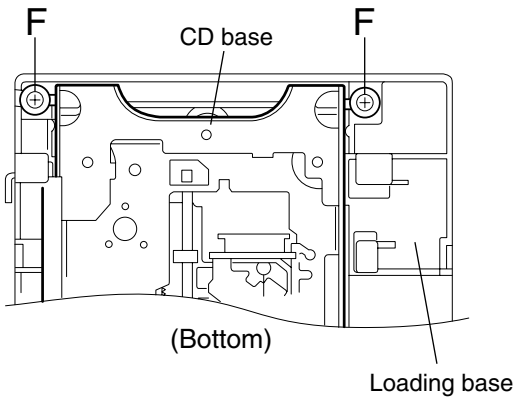


Fig.10

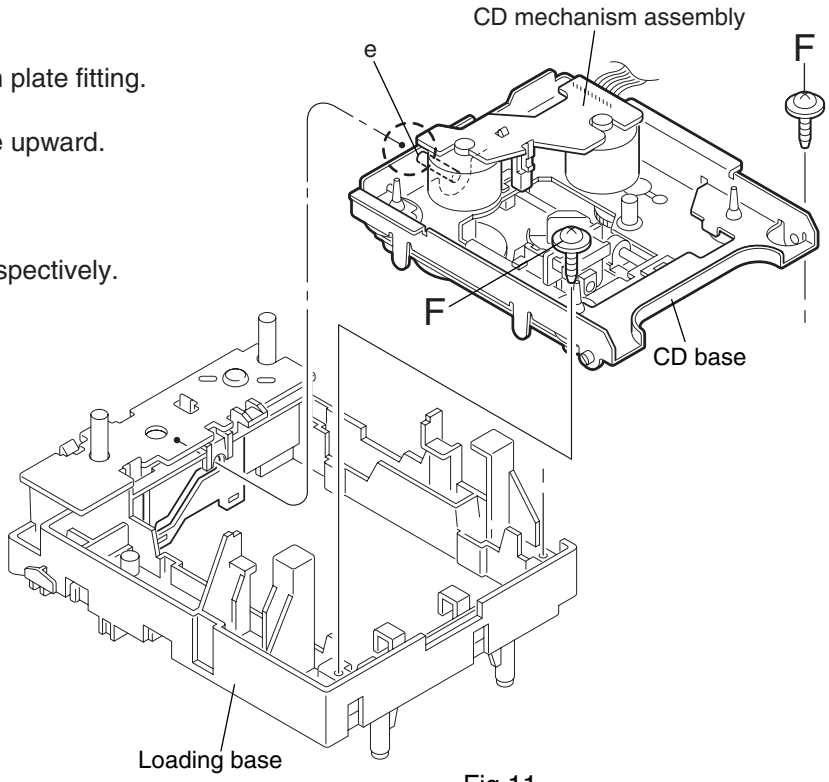


Fig.11

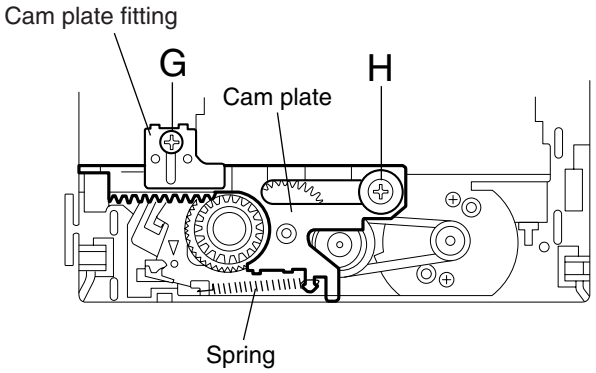


Fig.12

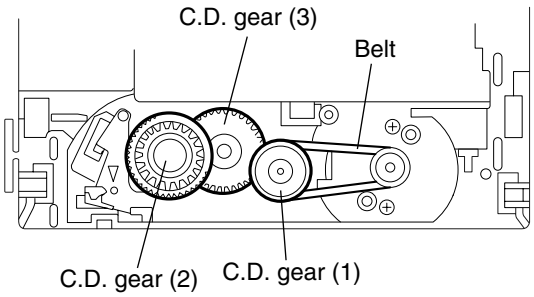


Fig.13

Adjustment method

■ Measurement Instruments Required for Adjustment

1. Low frequency oscillator
   This oscillator should have a capacity to output 0dBs to 600 Ω at an oscillation frequency of 50Hz-20kHz.
2. Attenuator impedance : 600 Ω
3. Electronic voltmeter
4. Distortion meter
5. Frequency counter
6. Wow & flutter meter
7. Test tape
   VT703L : Head azimuth
   VT712 : Tape speed and running unevenness (3kHz)
   VT724 : Reference level (1kHz)
8. Blank tape
   TYPE Ⅰ : AC-225
   TYPE Ⅱ : AC-514
9. Torque gauge : For play and back tension FWD(TW2111A), REV(TW2121a) and FF/REW(TW2231A)
10. Test disc: CTS-1000

■ Measurement conditions

Power supply voltage
AC110V/127V/220V/230V～240V ∿, adjustable
Reference output : Speaker : 0.775V/4Ω
: Headphone : 0.077V/32Ω
Reference frequency and
input level ---------- 1kHz, AUX : -8dBs
Measurement output terminal ------- at Speaker J3002
※ Load resistance ---------- 4Ω

● Radio Input signal

AM frequency ---------- 400Hz
AM modulation ---------- 30%
FM frequency ---------- 400Hz
FM frequency deviation ---------- 22.5kHz

● Tuner section

FM tuning range: 87.5MHz～108.00MHz
AM tuning range:
At 9kHz intervals: 531kHz～1,710kHz
At 10kHz intervals: 530kHz～1,710kHz
Voltage applied to tuner ---------- +B : DC5.7V
VT : DC 12V
Reference measurement
output ---------- 26.1mV(0.28V)/3Ω
Input positions ------- AM : Standard loop antenna
FM : TP1 (hot) and TP2 (GND)

● Standard measurement position of volume

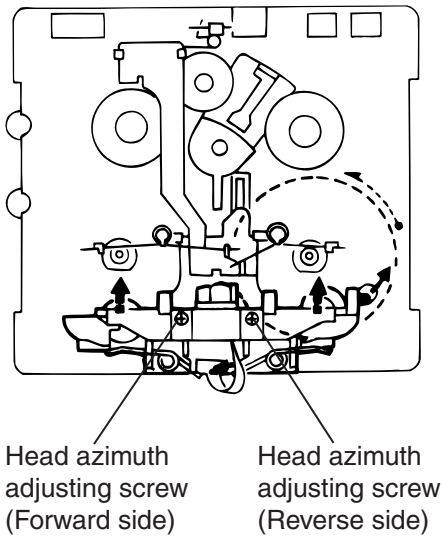
Function switch ---------- to Tape
Beat cut switch ---------- to Cut
Super Bass/Active hyper Bass ---------- to OFF
Bass Treble ---------- to Center
Adjustment of main volume to reference output
VOL : 28

Precautions for measurement

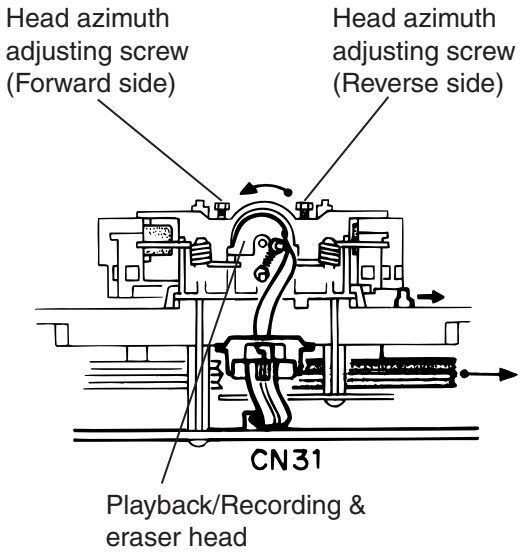
1. Apply 30pF and 33kΩ to the IF sweeper output side and 0.082μF and 100kΩ in series to the sweeper input side.
2. The IF sweeper output level should be made as low as possible within the adjustable range.
3. Since the IF sweeper is a fixed device, there is no need to adjust this sweeper.
4. Since a ceramic oscillator is used, there is no need to perform any MIX adjustment.
5. Since a fixed coil is used, there is no need to adjust the FM tracking.
6. The input and output earth systems are separated. In case of simultaneously measuring the voltage in both of the input and output systems with an electronic voltmeter for two channels, therefore, the earth should be connected particularly carefully.
7. In the case of BTL connection amp., the minus terminal of speaker is not for earthing. Therefore, be sure not to connect any other earth terminal to this terminal. This system is of an BTL system.
8. For connecting a dummy resistor when measuring the output, use the wire with a greater code size.
9. Whenever any mixed tape is used, use the band pass filter (DV-12).

<<Arrangement of Adjusting Position>>

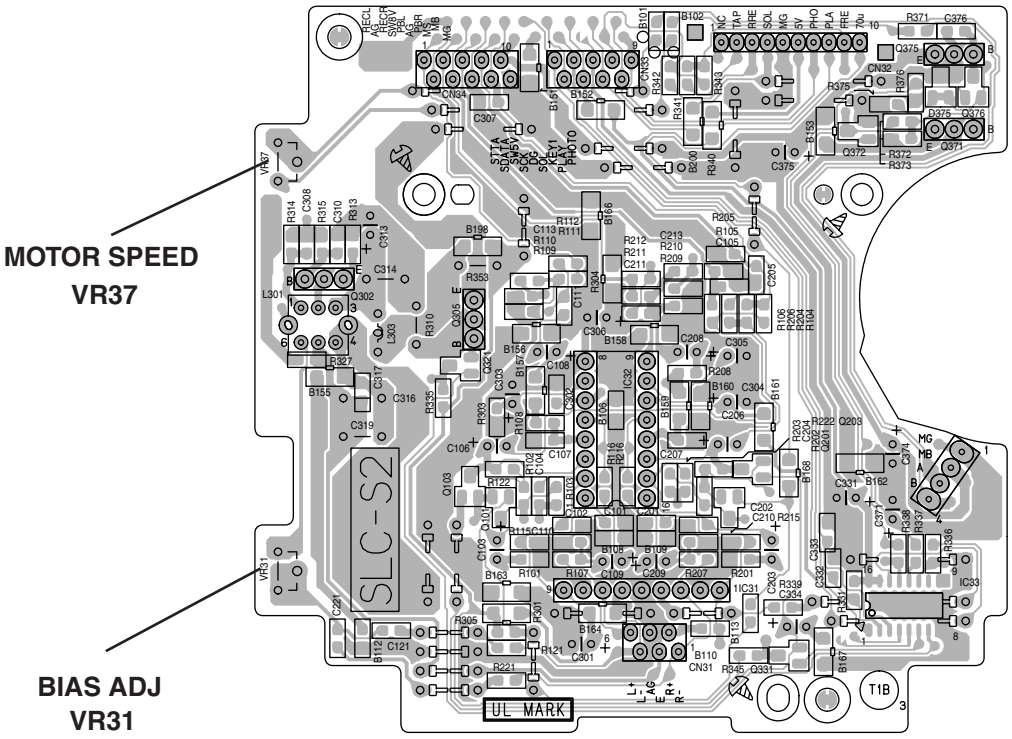
Cassette mechanism section



Cassette mechanism section (Back side)



Cassette AMP board



■ Tape Recorder Section

Items	Measurement conditions	Measurement method	Standard Values	Adjusting positions
Confirmation of head angle	Test tape : VT703L (8kHz) Measurement output terminal : Speaker terminal Speaker R (Load resistance: 4Ω) : Headphone terminal	1 Playback the test tape VT703L (8kHz) 2 With the recording & playback mechanism, adjust the head azimuth screw so that the forward and reverse output levels become maximum. After adjustment, lock the head azimuth at least by half turn. 3 In either case, this adjustment should be performed in both the forward and reverse directions with the head azimuth screw.	Maximum output	Adjust the head azimuth screw only when the head has been changed.
Confirmation of tape speed	Test tape : VT712 (3kHz) Measurement output terminal : Headphone terminal	Adjust VR37 so that the frequency counter reading becomes 2,940~3,090Hz ± when playing back the test tape VT712 (3kHz) with playback and recording mechanism after ending forward winding of the tape.	Tape speed of deck : 2,940 ~ 3,090Hz	VR37

■ Reference Values for Confirmation Items

Items	Measurement conditions	Measurement method	Standard Values	Adjusting positions
Difference between the forward and reverse speed	Test tape : VT712 (3kHz) Measurement output terminal : Speaker terminal Speaker R (Load resistance: 4 Ω) Measurement output terminal : Headphone	When the test tape VT712 (3kHz) has been played back with the recording and playback mechanism at the beginning of forward winding, the frequency counter reading of the difference between both of the mechanism should be 6.0Hz or less.	6.0Hz or less	Head azimuth screw
Wow & flutter	Test tape : VT712 (3kHz) Measurement output terminal : Headphone terminal	When the test tape VT712 (3kHz) has been played back with the recording and playback mechanism at the beginning of forward winding, the frequency counter reading of wow & flutter should be 0.25% or less (WRMS).	0.25% or less (WRMS)	

■ Electrical Performance

Items	Measurement conditions	Measurement method	Standard Values	Adjusting positions
Adjustment of recording bias current (Reference Value)	・Mode: Forward or reverse mode ・Recording mode ・Test tape : AC-514 to TYPE Ⅱ and AC-225 to TYPE Ⅰ Measurement output terminal : Both recording and headphone terminals	1 With the recording and playback mechanism, load the test tapes (AC-514 to TYPE Ⅱ and AC-225 to TYPE Ⅰ), and set the mechanism to the recording and pausing condition in advance. 2 After connecting 100 Ω in series to the recorder head, measure the bias current with a valve voltmeter at both of the terminals. 3 After resetting the [PAUSE] mode, start recording. At this time, adjust VR31 for Lch and VR32 for Rch so that the recording bias current values become 4.0 μA (TYPE Ⅰ) and 4.20 μA (TYPE Ⅱ).	AC-225 : 4.20 μA AC-514 : 4.0 μA	VR31
Adjustment of recording and playback frequency characteristics	Reference frequency : 1kHz and 10kHz (REF.: -20dB) Test tape : AC-514 to TYPE Ⅱ Measurement input terminal : OSC IN	1 With the recording and playback mechanism, load the test tapes (AC-514 to TYPE Ⅱ), and set the mechanism to the recording and pausing condition in advance. 2 While repetitively inputting the reference frequency signal of 1kHz and 10kHz from OSC IN, record and playback the rape. 3 While recording and playback the test tape in TYPE Ⅱ, adjust VR31 for Lch and VR32 for Rch so that the output deviation between 1kHz and 10kHz becomes -1dB±2dB.	Output deviation between 1kHz and 10kHz : -1dB±2dB	VR31

■ Reference Values for Electrical Function Confirmation Items

Items	Measurement conditions	Measurement method	Standard Values	Adjusting positions
Recording bias frequency	Forward or reverse ・Test tape : TYPE Ⅱ (AC-514) ・Measurement terminal : BIAS TP on P.C. board	1 While changing over to and from BIAS 1 and 2, confirm that the frequency is changed. 2 With the recording and playback mechanism, load the test tape. (AC-514 to TYPE Ⅱ), and set the mechanism to the recording and pausing condition in advance. 3 Confirm that the BIAS TP frequency on the P.C. board is 100kHz ± 6kHz.	100 kHz ±6 kHz	
Eraser current (Reference value)	Forward or reverse ・Recording mode ・Test tape : AC-514 to TYPE Ⅱ and AC-225 to TYPE Ⅰ Measurement terminal : Both of the eraser head terminals	1 While recording and playback mechanism, load the test tapes (AC-514 to TYPE Ⅱ and AC-225 to TYPE Ⅰ), and set the mechanism to the recording and pausing conditions in advance. 2 After setting to the recording conditions, connect 1W in series to the eraser head on the recording and playback mechanism side, and measure the eraser current from both of the eraser terminals.	TYPE Ⅱ : 120 mA TYPE Ⅰ : 75 mA	

■ Extension code connecting method

Flow of functional operation until TOC read (CD)

Power ON → Power Key → Slider turns REST SW ON.

Check Point: Check that the voltage at the pin4 of CN601 is 0V (a moment)?

Slider turns REST SW ON. → Automatic tuning of TE offset

Automatic tuning of TE offset → Laser ON

Laser ON → Check that the voltage at the pin2 of IC601 is 0V?

Laser ON → Detection of disc

Detection of disc → Automatic tuning of Foucus offset

Automatic tuning of Foucus offset → Automatic measurement of Focus A-curve amplitude

Automatic measurement of Focus A-curve amplitude → Confirm that the Focus error S-cuve siganl at the pin23 of IC601 is approx.2Vp-p

Automatic measurement of Focus A-curve amplitude → Disc is rotated

Disc is rotated → Confirm that the siganl from pin22 IC603 is 0V as a accelerated pulse during approx.400ms.

Disc is rotated → Focus servo ON (Tracking servo ON)

Focus servo ON (Tracking servo ON) → Automatic measurement of Tracking error amplitude

Automatic measurement of Tracking error amplitude → Confirm the waveform of the Tracking error signal at the pin20 of IC601 (See fig-1)

Automatic measurement of Tracking error amplitude → Automatic tuning of Tracking error balance

Automatic tuning of Tracking error balance → Automatic tuning of Focus error balance

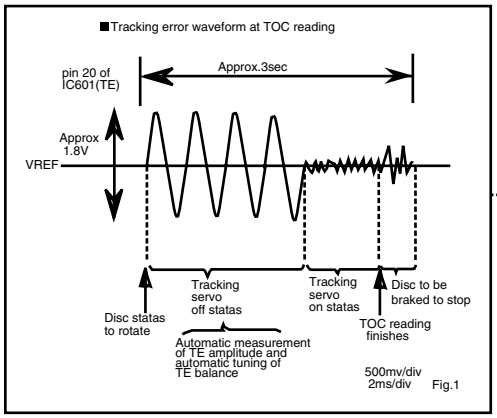
Automatic tuning of Focus error balance → Automatic tuning of Focus error gain

Automatic tuning of Focus error gain → Automatic tuning of Tracking error gain

Automatic tuning of Tracking error gain → TOC reading

TOC reading → Confirm the eys-pattern at the lead of TP1

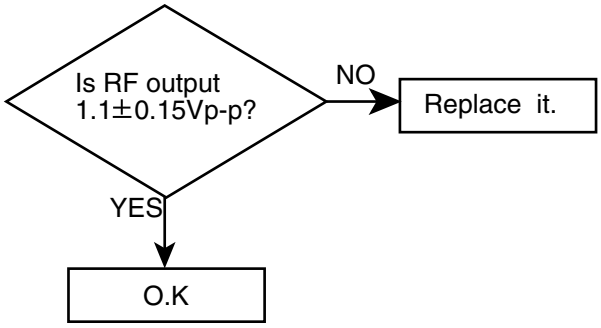
TOC reading → Play a disc



Maintenance of laser pickup

(1) Cleaning the pick up lens
Befor you replace the pick up, please try to clean the lens with a alcohol soaked cotton swab.

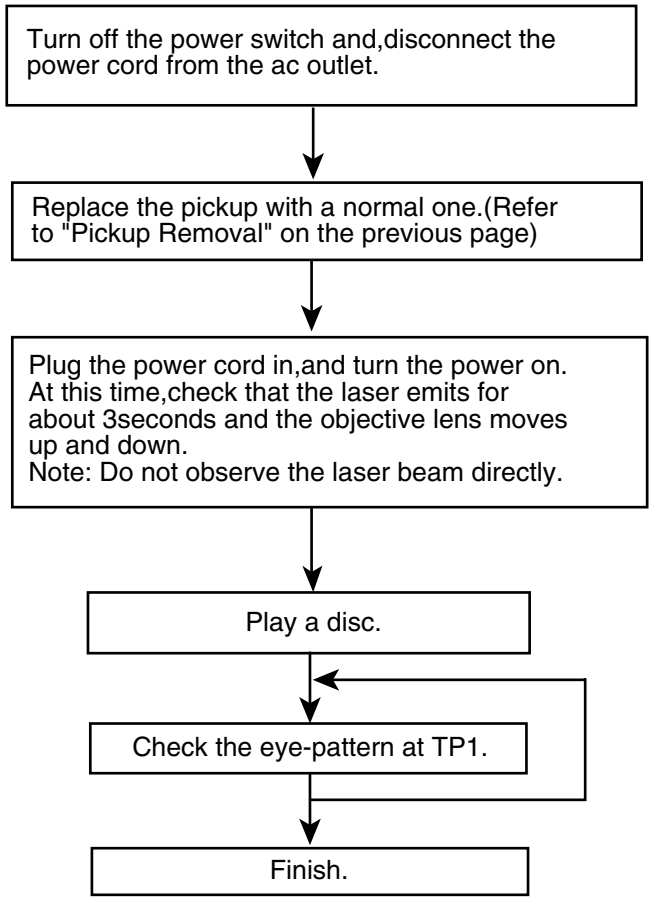
(2) Life of the laser diode (Fig.1)
When the life of the laser diode has expired, the following symptoms wil appear.
(1) The level of RF output (EFM output:amplitude of eye pattern) will below.



(Fig.1)

(3) Semi-fixed resistor on the APC PC board
The semi-fixed resistor on the APC printed circuit board which is attached to the pickup is used to adjust the laser power.Since this adjustment should be performed to match the characteristics of the whole optical block, do not touch the semi-fixed resistor.
If the laser power is lower than the specified value,the laser diode is almost worn out, and the laser pickup should be replaced.
If the semi-fixed resistor is adjusted while the pickup is functioning normally,the laser pickup may be damaged due to excessive current.

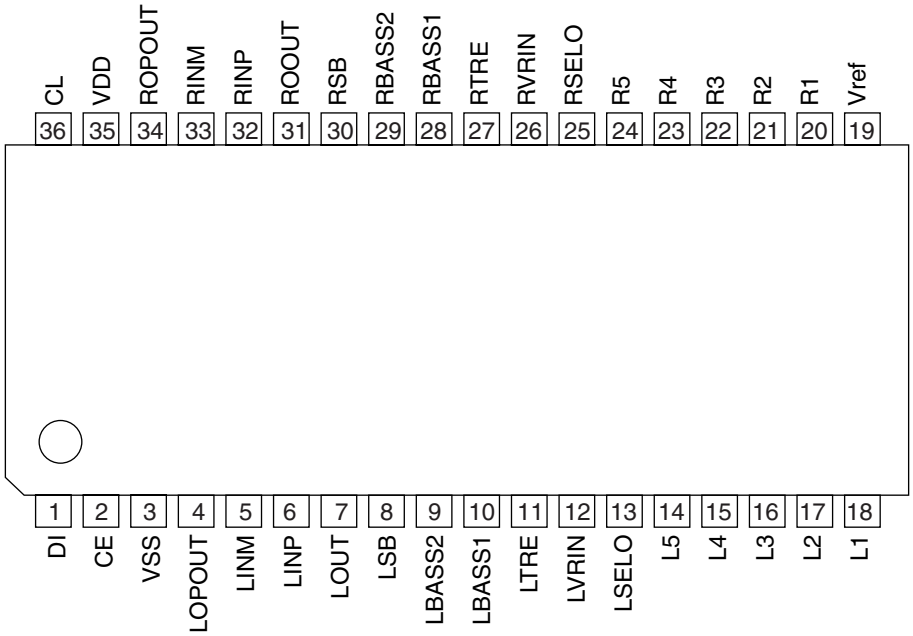
Replacement of laser pickup


Turn off the power switch and,disconnect the power cord from the ac outlet.
Replace the pickup with a normal one.(Refer to "Pickup Removal" on the previous page)
Plug the power cord in,and turn the power on.
At this time,check that the laser emits for about 3seconds and the objective lens moves up and down.
Note: Do not observe the laser beam directly.
Play a disc.
Check the eye-pattern at TP1.
Finish.

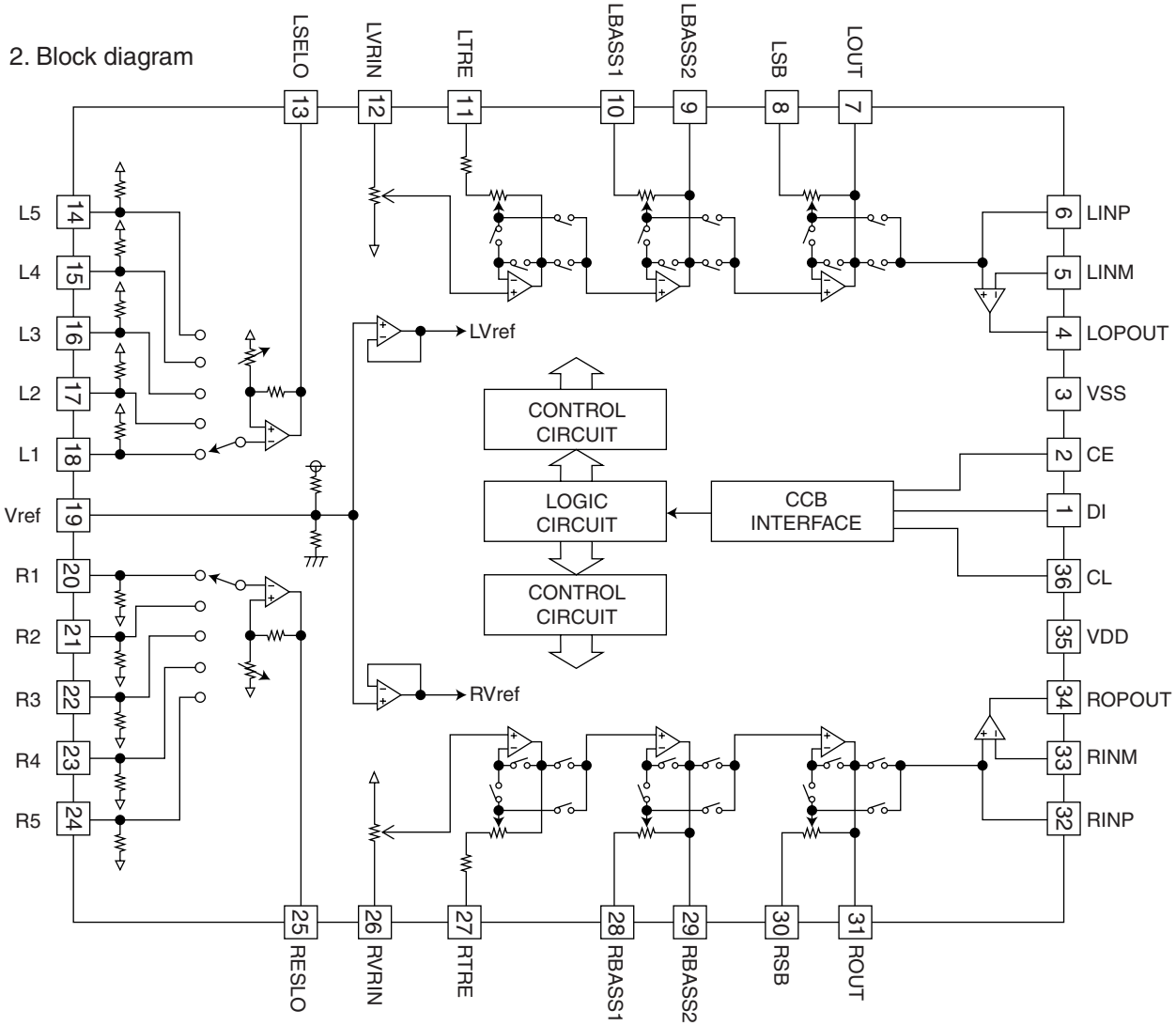
Description of major ICs

■ LC75345M-X (IC901) : E.volume

1. Pin layout



2. Block diagram

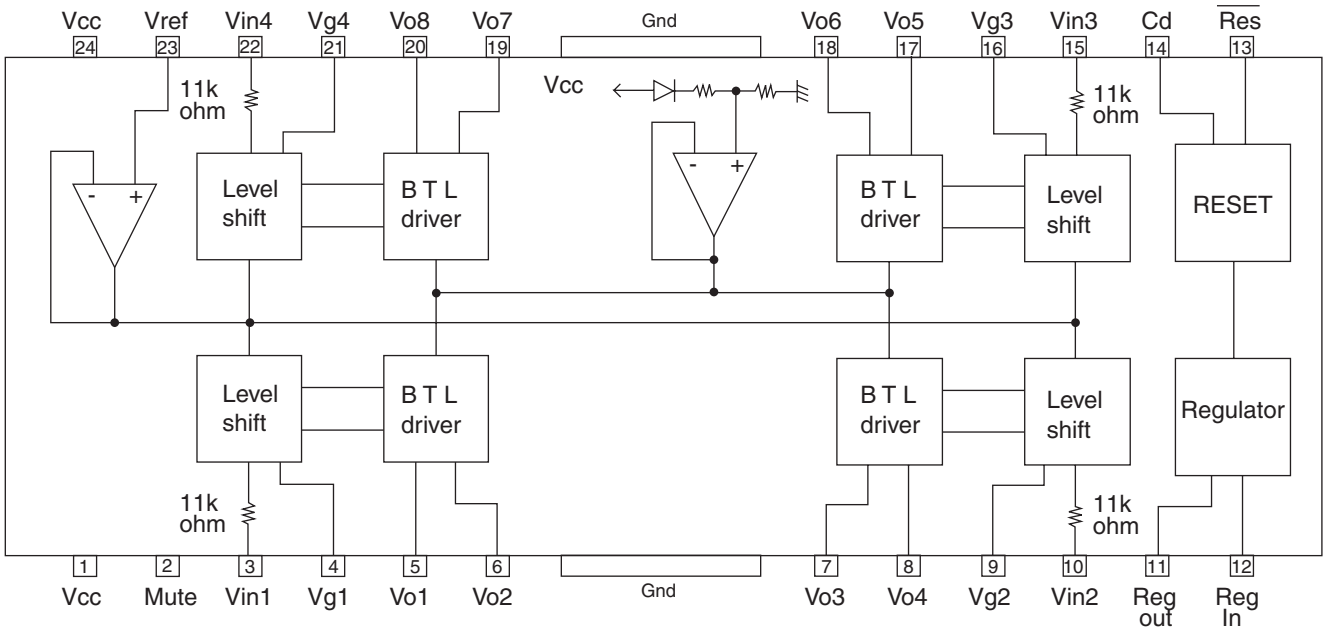


3. Pin function

Pin No.	Symbol	Function
1	DI	Serial data and clock input pin for control.
2	CE	Chip enable pin.
3	VSS	Ground pin.
4	LOPOUT	Output pin of general-purpose operation amplifier.
5	LINM	Non-inverted input pin of general-purpuse operation amplifier.
6	LINP	Non-inverted input pin of general-purpuse operation amplifier.
7	LOUT	ATT + equalizer output pin.
8	LSB	Capacitor and resistor connection pin comprising filters for bass and super-bass band.
9	LBASS2	Capacitor and resistor connection pin comprising filters for bass and super-bass band.
10	LBASS1	Capacitor and resistor connection pin comprising filters for bass and super-bass band.
11	LTRE	Capacitor and resistor connection pin comprising treble band filter.
12	LVRIN	Volume input pin.
13	LSELO	Input selector output pin.
14	L5	Input signal pin.
15	L4	Input signal pin.
16	L3	Input signal pin.
17	L2	Input signal pin.
18	L1	Input signal pin.
19	Vref	0.5 x VDD voltage generation block for analog ground.
20	R1	Input signal pin.
21	R2	Input signal pin.
22	R3	Input signal pin.
23	R4	Input signal pin.
24	R5	Input signal pin.
25	RSELO	Input selector output pin.
26	RVRIN	Volume input pin.
27	RTRE	Capacitor connection pin comprising treble band filter.
28	RBASS1	Capacitor and resistor connection pin comprising filter for bass and super-bass band.
29	RBASS2	Capacitor and resistor connection pin comprising filter for bass and super-bass band.
30	RSB	Capacitor and resistor connection pin comprising filter for bass and super-bass band.
31	ROUT	ATT + equalizer output pin.
32	RINP	Non inverted input pin of general-purpose operation amplifier.
33	RINM	Non inverted input pin of general purpose operation amplifier.
34	ROPOUT	Output pin of general-purpose operation amplifier.
35	VDD	Supply pin.
36	CL	Serial data and clock input pin for control.

■ LA6541-X (IC801) : Servo driver

1. Pin Layout & block diagram

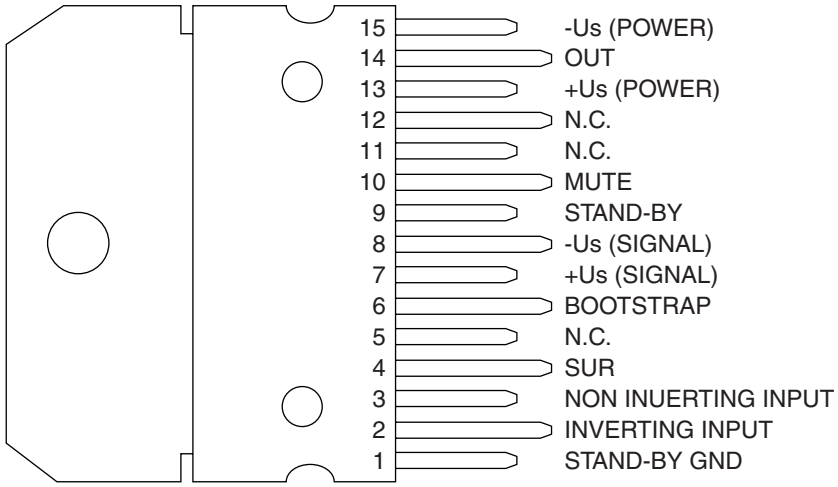


2. Pin function

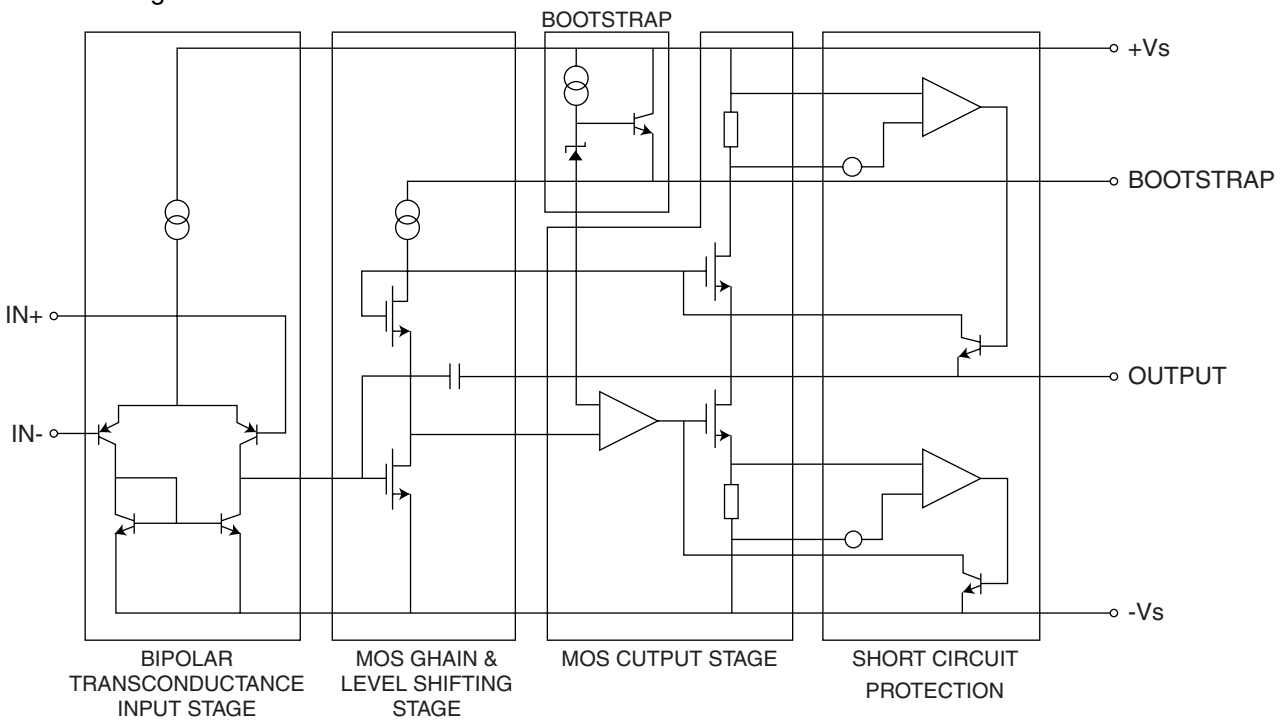
Pin No.	Symbol	Function
1	Vcc	Power supply (Shorted to pin 24)
2	Mute	All BTL amplifier outputs ON / OFF
3	Vin1	BTL AMP 1 input pin
4	Vg1	BTL AMP 1 input pin (For gain adjustment)
5	Vo1	BTL AMP 1 input pin (Non inverting side)
6	Vo2	BTL AMP 1 input pin (Inverting side)
7	Vo3	BTL AMP 2 input pin (Inverting side)
8	Vo4	BTL AMP 2 input pin (Non inverting side)
9	Vg2	BTL AMP 2 input pin (For gain adjustment)
10	Vin2	BTL AMP 2 input pin
11	Reg Out	External transistor collector (PNP) connection. 5V power supply output
12	Reg In	External transistor (PNP) base connection
13	Res	Reset output
14	Cd	Reset output delay time setting (Capacitor connected externally)
15	Vin3	BTL AMP 3 input pin
16	Vg3	BTL AMP 3 input pin (For gain adjustment)
17	Vo5	BTL AMP 3 output pin (Non inverting side)
18	Vo6	BTL AMP 3 output pin (Inverting side)
19	Vo7	BTL AMP 4 output pin (Inverting side)
20	Vo8	BTL AMP 4 output pin (Non inverting side)
21	Vg4	BTL AMP 4 output pin (For gain adjustment)
22	Vin4	BTL AMP 4 output pin
23	Vref	Level shift circuit's reference voltage application
24	Vcc	Power supply (Shorted to pin 1)

■ TDA7294 (IC940, IC941) : Audio amp.

1. Pin layout

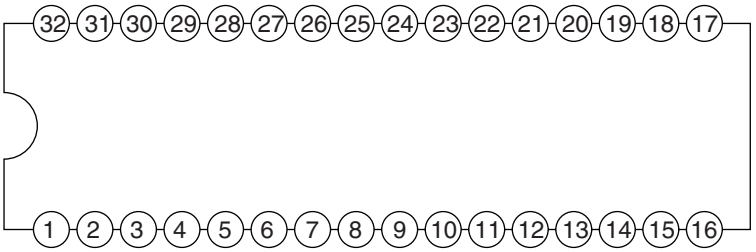


2. Block diagram

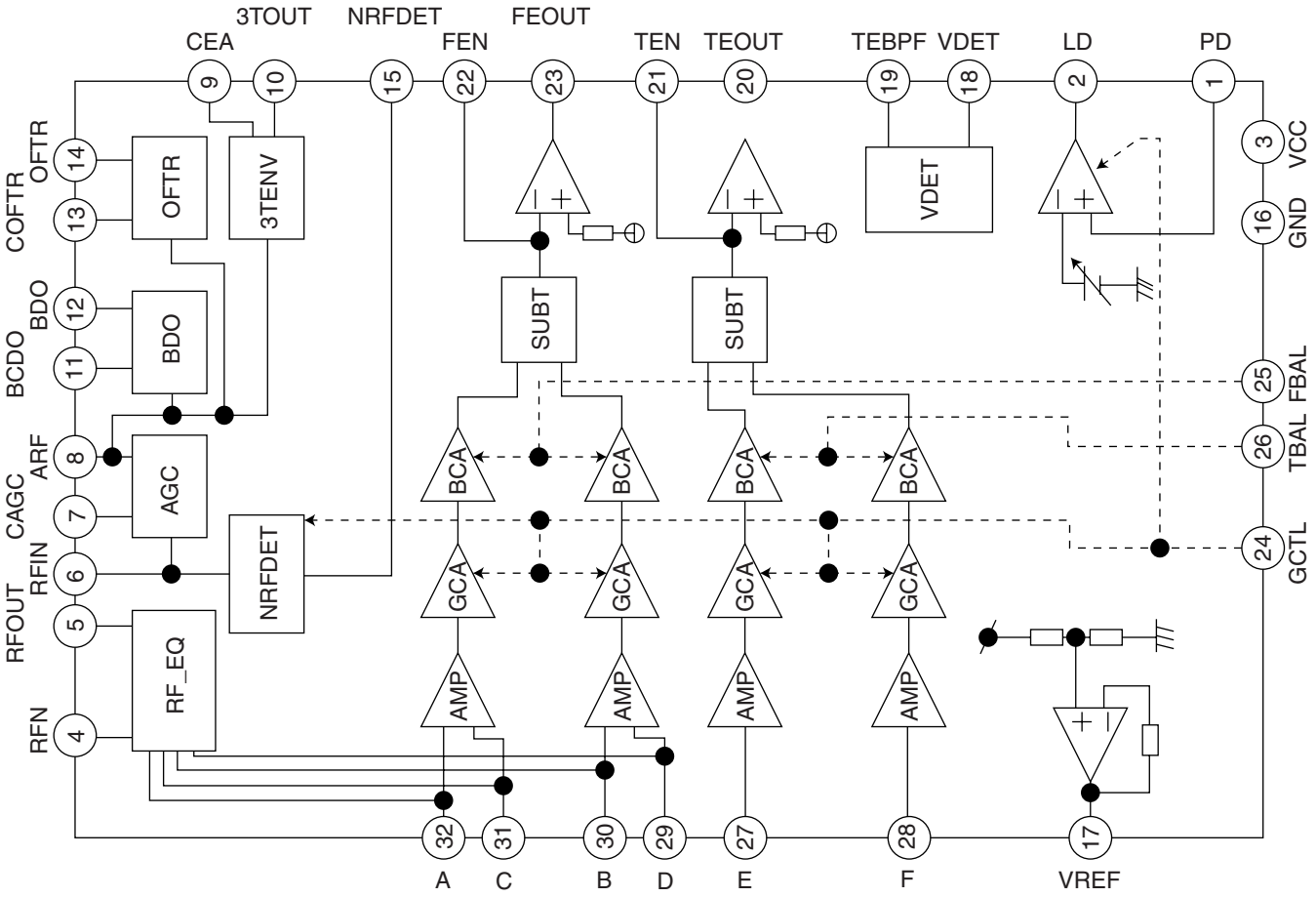


■ AN22000A-W (IC601) : RF head amp.

1. Pin layout



2. Block diagram

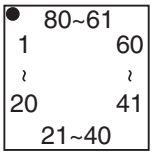


3. Pin function

Pin No.	Function	Pin No.	Function
1	APC amp input terminal.	17	VREF output terminal.
2	APC amp output terminal.	18	VDET output terminal.
3	Power supply.	19	VDET input terminal.
4	RF amp negative input terminal.	20	TE amp. output terminal.
5	RF amp output terminal.	21	TE amp. negative input terminal.
6	AGC input terminal.	22	FE amp. negative input terminal.
7	AGC loop filter capacitor connection terminal.	23	FE amp. output terminal.
8	AGC output terminal.	24	GCTL & APC terminal.
9	Capacitor connection terminal for HPF-amp.	25	FBAL control terminal.
10	3TENV output terminal.	26	TBAL control terminal.
11	Capacitor connection terminal for RF enberope detection.	27	Tracking signal input terminal 1.
12	BDO output terminal.	28	Tracking signal input terminal 2.
13	Capacitor connection terminal for RF enverope detection.	29	Focus signal input terminal 4.
14	OFTR output terminal.	30	Focus signal input terminal 3.
15	NRDET output terminal.	31	Focus signal input terminal 2.
16	Ground terminal.	32	Focus signal input terminal 1.

■ MN662748RPMFA (IC651) : DSP

1. Terminal layout

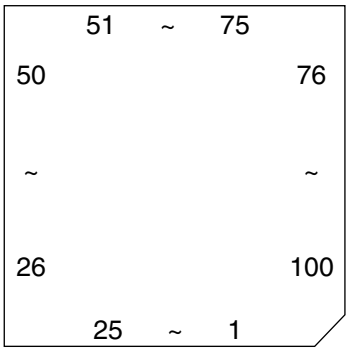


2. Pin function

Pin No	Symbol	I/O	Function	Pin No	Symbol	I/O	Function
1	BCLK	-	Not use	41	PLLF2	-	Not use
2	LRCK	-	Not use	42	TOFS	-	Not use
3	SRDATA	-	Not use	43	WVEL	-	Not use
4	DVDDI	-	Power supply for digital circuit	44	ARF	I	RF signal input
5	DVSSI	-	GND for digital circuit	45	IREF	I	Reference current input
6	TX	-	Not use	46	DRF	I	Bias pin for DSL
7	MCLK	I	Micro computer command clock signal input	47	DSLF	I/O	Loop filter pin for DSL
				48	PLLF	I/O	Loop filter pin for PLL
8	MDATA	I	Micro computer command data input	49	VCOF	I/O	Loop filter pin for VCO
				50	AVDD2	-	Power supply for analog circuit
9	MLD	I	Micro computer command load signal input (L: Load)				
				51	AVSS2	-	GND for analog circuit
10	SENSE	-	Not use, connect to TP716	52	EFM	-	Not use, connect to TP724
11	FLOCK	-	Not use, connect to TP717	53	PCK	O	Clock output for PLL
12	TLOCK	-	Not use, connect to TP718	54	VCOF2	I/O	Loop filter pin for Digital servo VCO
13	BLKCK	O	Sub code block clock signal output				
				55	SUBC	-	Not use
14	SQCK	I	External clock input for sub code Q register input	56	SBCK	-	Not use
				57	VSS	-	GND for crystal oscillation circuit
15	SUBQ	O	Sub code Q data output				
16	DMUTE	-	Not use, connect to TP719	58	X1	I	Input for crystal oscillation circuit (f=16.9344MHz)
17	STAT	O	Status signal input				
18	RST	I	Reset signal input (L: Reset)	59	X2	O	Output for crystal oscillation circuit (f=16.9344MHz)
19	SMCK	-	Not use				
20	PMCK	-	Not use, connect to TP720	60	VDD	-	Power supply for crystal oscillation circuit
21	TRV	O	Traverse enforced output				
22	TVD	O	Traverse drive output	61	BYTCK/TRVSTP	-	Not use
23	PC	-	Not used	62	CLDCK	O	Sub code frame clock signal output
24	ECM	O	Spindle motor drive signal (Enforced mode output)				
				63	FCLK	-	Not used
25	ECS	O	Spindle motor drive signal (Servo error signal output)	64	IPFLAG	O	Interpolation flag signal output, Connect to TP721
26	KICK	O	Kick pulse output	65	FLAG	O	Flag signal output, Connect to TP722
27	TRD	O	Tracking drive output				
28	FOD	O	Focus drive output	66	CLVS	-	Not use
29	VREF	I	Reference voltage for D/A output block	67	CRC	-	Not use
				68	DEMPH	O	De-emphasis detect signal output, Connect to TP723
30	FBAL	O	Focus balance adjust signal output				
				69	RESY	-	Not use
31	TBAL	O	Tracking balance adjust signal output	70	IOSEL	I	Mode select pin, Connect to DVDD1 (H fix)
32	FE	I	Focus error signal input (Analog input)	71	/TEST	I	Test pin, Connect to DVDD1 (H fix)
33	TE	I	Tracking error signal input (Analog input)	72	AVDD1	-	Power supply for analog circuit
34	RFENV	I	RF envelope signal input (Analog input)	73	OUTL	O	L-channel audio output
				74	AVSS1	-	GND for analog circuit
35	VDET	I	Vibration detect signal input (H:Detect)	75	OUTR	O	R-channel audio output
				76	RSEL	I	RF signal polarity setting pin, Connect to DVDD1 (H fix)
36	OFT	I	Off track signal input (H:Off track)				
				77	CSEL	I	Oscillation frequency setting pin, Connect to GND (L fix)
37	TRCRS	I	Track cross signal input				
38	/RFDET	I	RF detect signal input (L:Detect)	78	PSEL	I	IOSEL=H, Test pin, Connect to GND (L fix)
39	BDO	I	Drop out signal input (H:Drop out)	79	MSEL	I	IOSEL=H, SMCK output, Frequency select pin
40	LDON	O	Laser on signal output (H:ON)	80	SSEL	I	IOSEL=H, SMCK output, SUBQ output mode select pin

■ MN101C38CEK1 (IC931) : Micro controller

1. Pin layout



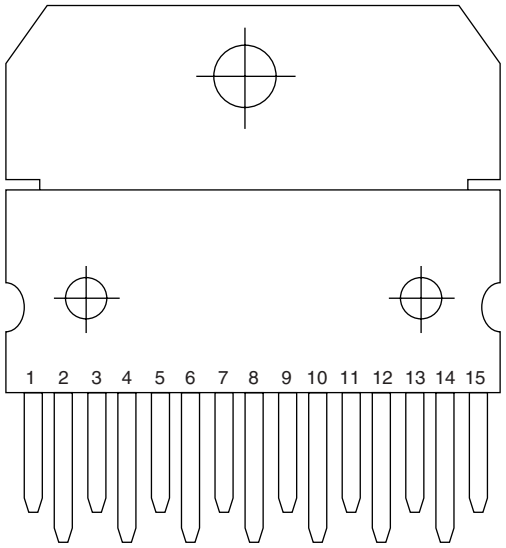
2. Pin Function

Pin No.	Symbol	I/O	Function
1~4	COM3~0	-	LCD Bias co mmon
5~7	VLC3~1	-	LCD Bias voltage
8	VDD	-	5V
9	OSC2	O	Main oscillation 12MHz
10	OSC1	I	Main oscillation 12MHz
11	VSS	-	Ground
12	NC	I	No use. Fixed to VSS.
13	NC	O	No use. Open
14	MMOD	I	Fixed to ground
15	VREF-	-	Ground
16	SAFETY0	I	Irregular voltage detection 0
17	SAFETY1	I	Irregular voltage detection 1
18	TAPE0	I	Tape Switch 0
19	TAPE1	I	Tape Switch 1
20, 21	KEY0, 1	I	Unit KEY INPUT
22	DOOR_RST	I	Rest/close switch detect port
23	CDSAFETY	I	CD safety voltage detect port
24	VREF+	-	5V
25	SDATA	I/O	Serial data (Tuner/ PLL IC)
26	NC	O	No use. OUTPUT LOW
27	SCK	O	Serial clock (Tuner/ PLL IC)
28	NC	O	No use. OUTPUT LOW
29	QRIN	I	Q-code data input port
30	SQCK	O	Q-code serial clock
31	F_CD	O	CD Function ("H"= CD)
32	/RST	I/O	RESET
33	MPX	I	FM stereo detection ('L'= stereo)
34	BCTL	O	During Back up set H, other case L. This back up means plug out.
35	VOLCE	O	volume chip enable
36	NC	O	No use. OUTPUT LOW
37	PROTR	I	Protector detect. When detect PROTR=L, set SPKMUTE to 'L'.
38	REM	I	Remoto control input
39	RDSCK	I	RDS clock
40	BLKCK	I	Block clock input port
41	FLAG	I	Error Correction Count Input
42	STAT	I	CD status input port
43	SMUTE	O	MUTE ON=L
44	SPKMUTE	O	Speaker mute.When detect PROTR=L, set SPKMUTE to 'L'.
45	AHB	O	Active Hyper Bass On/Off AHB OFF=H, AHB1, 2=L

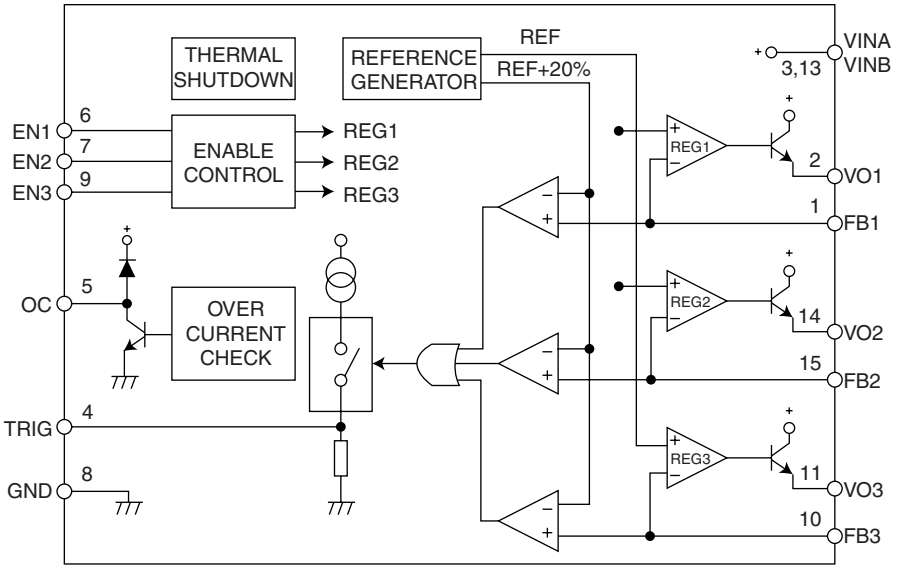
Pin No.	Symbol	I/O	Function
46	DIMCTL	O	LCD DIM control. DIMMER ON =L
47	LEDCTL	O	Power standby LED control STANDBY = L, POWER ON = H
48	SURR	O	Surround IC control, H:=Surroud on
49	NC	O	No use. Open
50	SEG12	O	SEGMENT OUTPUT
51	MDATA	O	CD data input port
52	MCLK	O	CD data clock
53	XRST	O	CD reset
54	MLD	O	CD command ready signal
55	STTA	O	Tape IC strobe
56	REEL	I	Reel pulse input
57	VOL+	I	Volume plus
58	VOL-	I	Volume minus
59	PERIOD	O	Tuner pLL strobe
60	F_TU	O	Tuner function ('H'=Tuner)
61	CLOSE	O	Door close motor control output
62	OPEN	O	Door open motor control output
63	P_OUT	O	Power on/off ('H'=Power ON)
64	BUP	I	Back up power detect. When detect 'H', goto backup mode (STOP mode).
65	BTLMUTE	O	BTL mute control port. MUTE ON =L During non CD play , MUTE ON.
66	NC	O	No use. OUTPUT LOW
67~88	SEG13~34	O	SEGMENT OUTPUT
89~100	SEG0~11	O	SEGMENT OUTPUT

■ L4909 (IC942) : Regulator

1. Pin layout



2. Block diagram

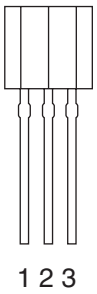


3. Pin functions

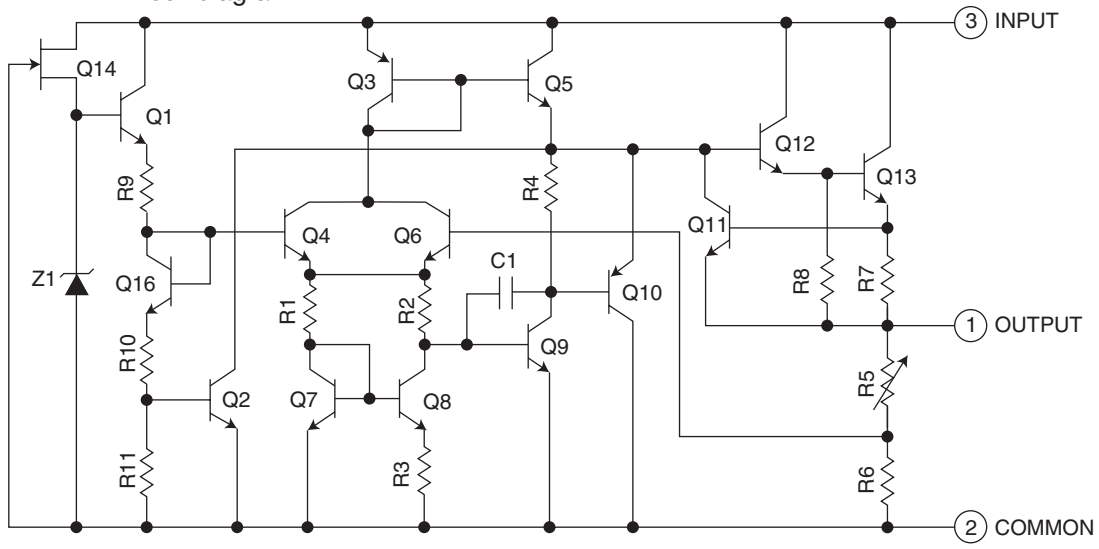
Pin No.	Symbol	Function
1	FB1	REG1 feedback voltage input
2	VO1	REG1 output voltage
3	VINA	Input DC supply voltage
4	TRIG	Trigger for external SCR (crowbar protection)
5	OC	Over current warning output
6	EN1	REG1 enable input
7	EN2	REG2 enable input
8	GND	Analog ground
9	EN3	REG3 enable input
10	FB3	REG3 feedback voltage input
11	VO3	REG3 output voltage
12	N.C.	Not connected
13	VINB	Input DC supply voltage
14	VO2	REG2 output voltage
15	FB2	REG2 feedback voltage input

■ KIA78S06P-T (IC932) : Regulator

1. Pin layout

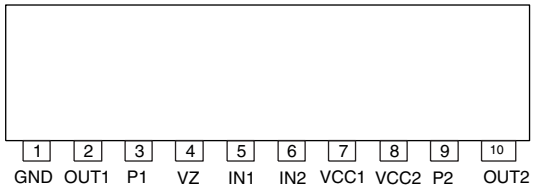


2. Block diagram



■ LB1641 (IC802) : DC motor driver

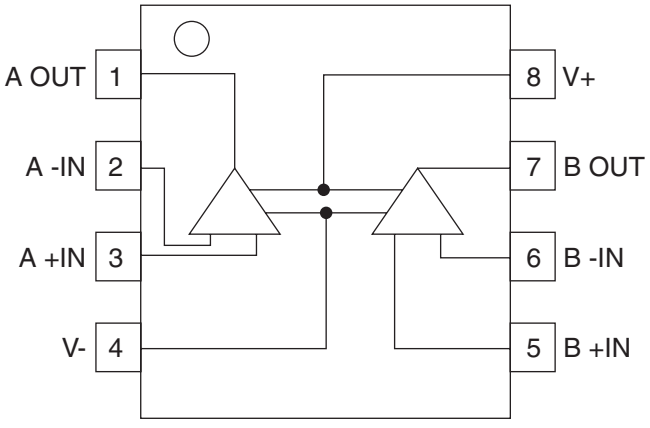
1. Pin layout



2. Pin function

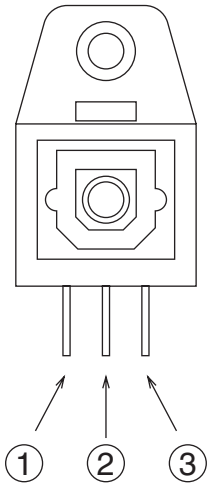
Input		Output		Mode
IN1	IN2	OUT1	OUT2	
0	0	0	0	Brake
1	0	1	0	CLOCKWISE
0	1	0	1	COUNTER-CLOCKWISE
1	1	0	0	Brake

■ NJM4580E-W (IC652) : Ope amp.



■ GP1FA550TZ (ICJ902) : Fiber-optic transmitter unit

1.Pin layout



2.Pin function

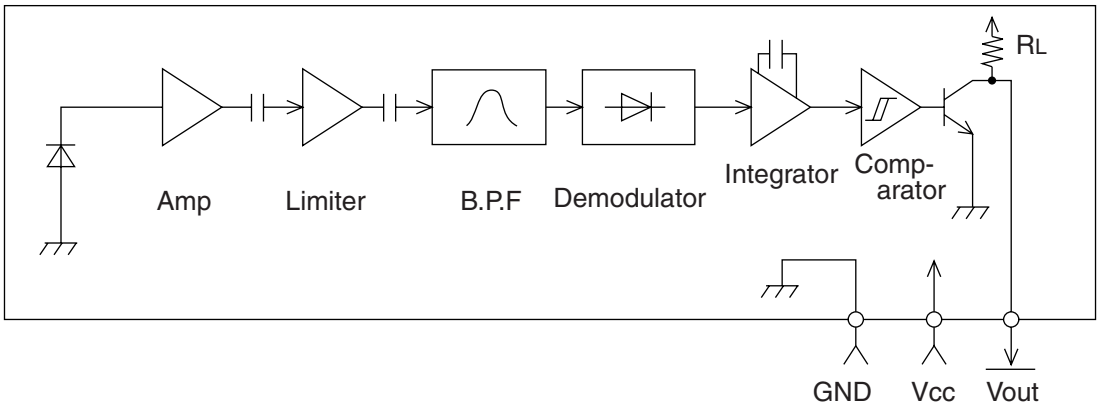
① Vin

② Vcc

③ GND

■ GP1UM261XK (IC750) : Detecting unit for remote control

1.Block diagram



JVC

VICTOR COMPANY OF JAPAN, LIMITED
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PERSONAL & MOBILE NETWORK BUSINESS UNIT. 10-1,1chome,Ohwatari-machi,Maebashi-city,371-8543,Japan

(No.21105) 200207

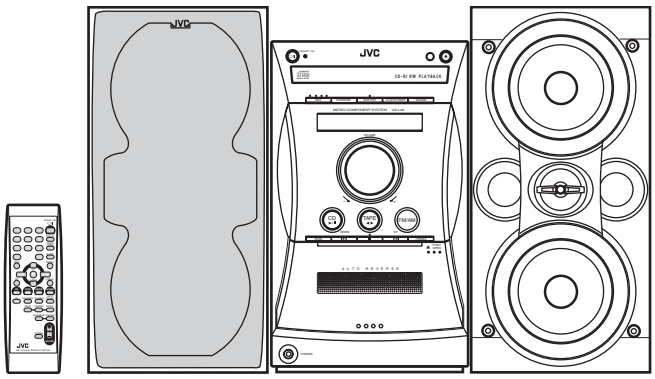
JVC

SCHEMATIC DIAGRAMS

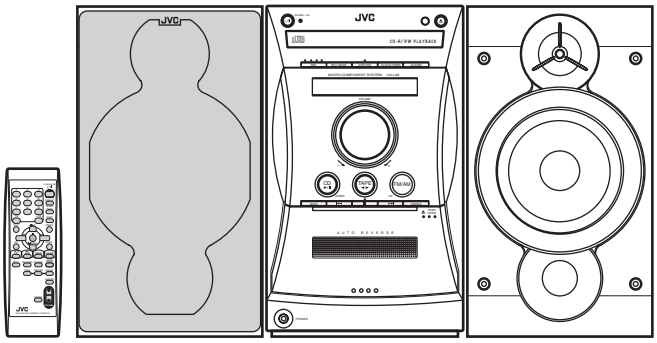
MICRO COMPONENT SYSTEM

UX-L40/UX-L30

CD-ROM No.SML200207



SP-UXL40 CA-UXL40 SP-UXL40



SP-UXL30 CA-UXL30 SP-UXL30

UX-L40
Area Suffix
US ---------- Singapore
UP ---------- Korea
UW ------- Brazil,Mexico,Peru

COMPACT disc DIGITAL AUDIO

UX-L30
Area Suffix
US ---------- Singapore
UP ---------- Korea
UW ------- Brazil,Mexico,Peru
UJ ---------- U.S.Military

Contents

Block diagram ---------- 2-1
Standard schematic diagrams ---------- 2-2
Printed circuit boards ---------- 2-9~13

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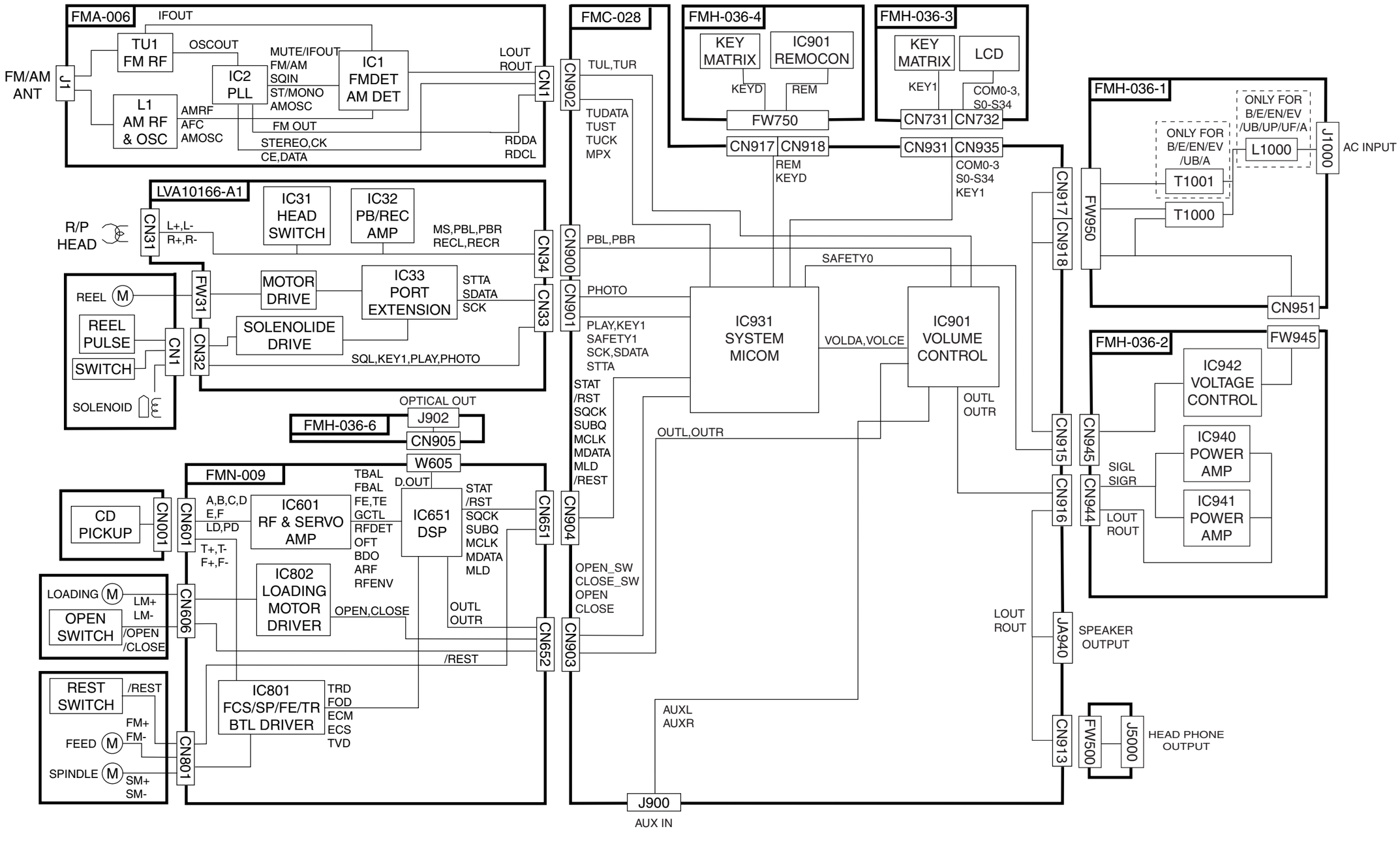
No.21105SCH
Jul. 2002

In regard with component parts appearing on the silk-screen printed side (parts side) of the PWB diagrams, the parts that are printed over with black such as the resistor (▬), diode (▬) and ICP (●) or identified by the "⚠" mark nearby are critical for safety.

(This regulation does not correspond to J and C version.)

Block diagram



Standard schematic diagrams

■Front circuit

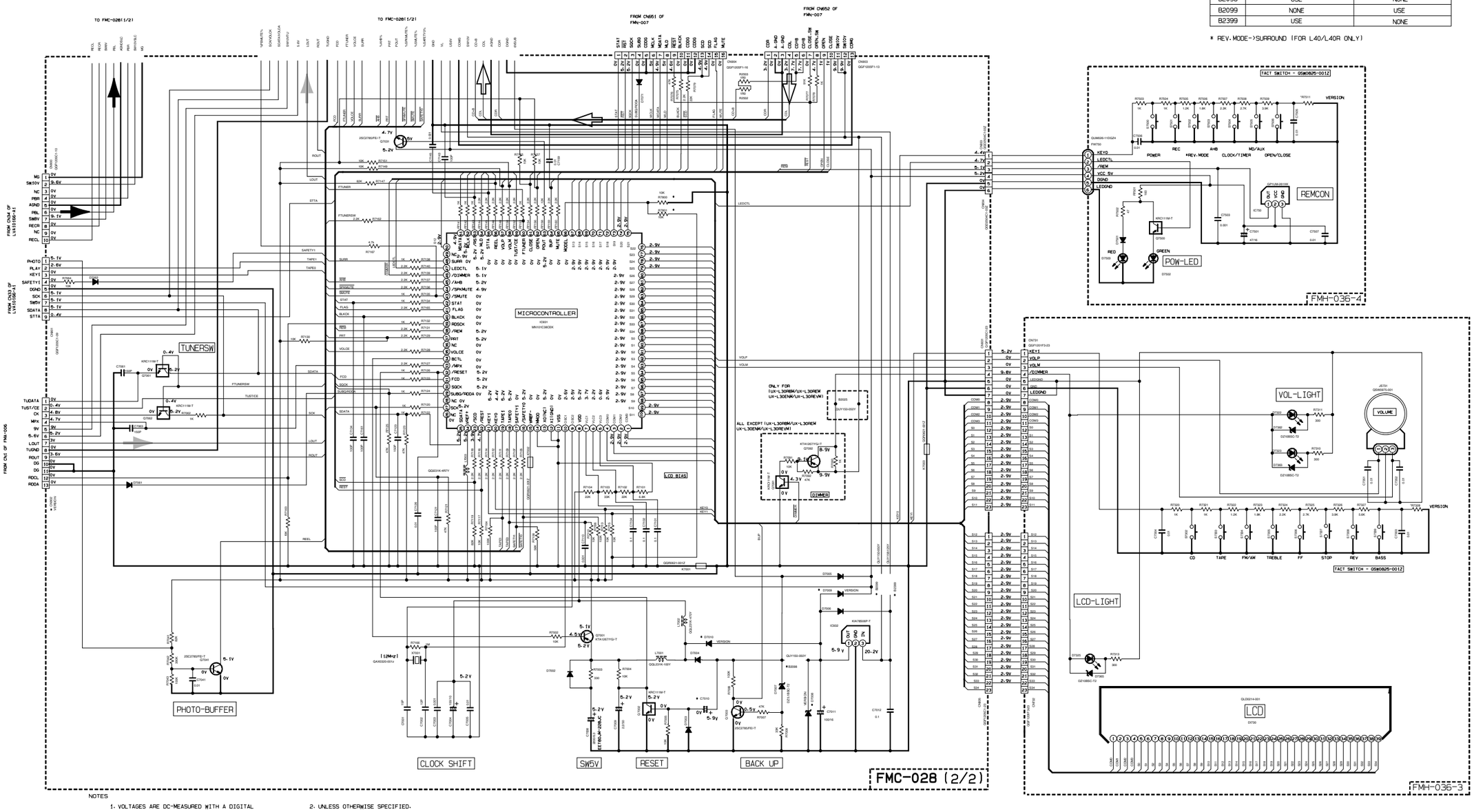
* MARK

ITEMS \ MODEL	FS-L30 UX-L30R UX-L30	UX-L40R UX-L40
R7800	USE	NONE
R7801	NONE	USE

* MARK

ITEMS \ VERSION	(J/C)	(UF/UJ/UP/ US/UT/UW)	(UY)	(UB/A)	(B/E/EN/EV)
CN902	QGF1205F1-09				QGF1205F1-13
D7071/BW	B2097				D7071
R7328 (VERSION)	82K	27K	–	–	–
R7511 (VERSION)	–	–	6.2K	82K	36K
C7010	4.7/50			10/50	
D7008	DZ8.2BSB			DZ6.2BSC	
D7009	NONE			1SS119-041-T2	
D7010	NONE			1SS119-041-T2	
B2098	USE			NONE	
B2099	NONE			USE	
B2399	USE			NONE	

* REV.MODE->SURROUND (FOR L40/L40R ONLY)



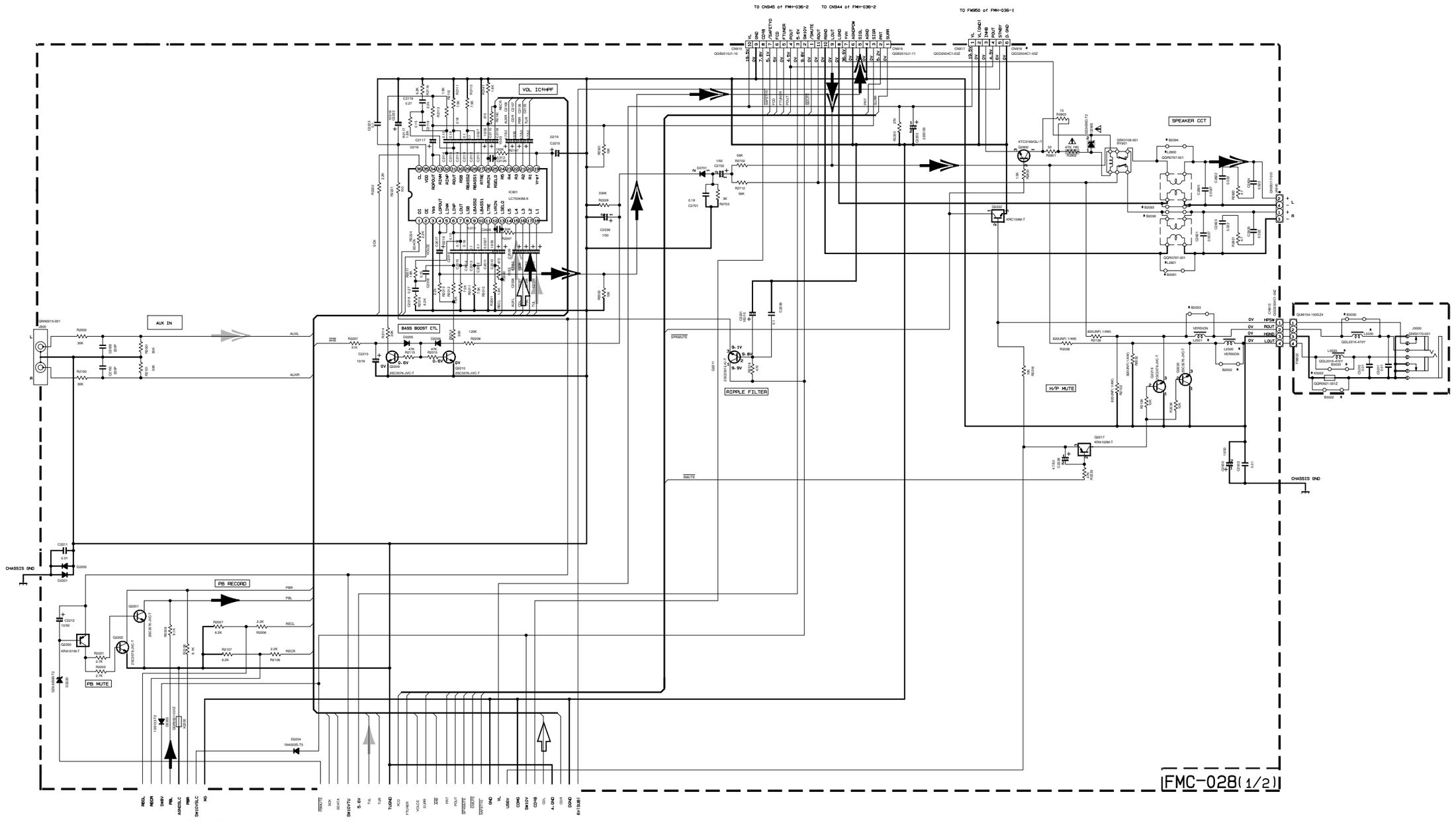
NOTES

1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER OR OSCILLOSCOPE WITHOUT INPUT SIGNAL. CONDITION --- CD STOP MODE

2. UNLESS OTHERWISE SPECIFIED.
ALL RESISTORS ARE 1/10W ±5% METAL GLAZE RESISTOR.
ALL CAPACITORS ARE CERAMIC CAPACITOR OR MYLAR CAPACITOR.
ALL RESISTANCE VALUES ARE IN OHM(Ω).
ALL CAPACITANCE VALUES ARE IN μF(P=pF).
ALL INDUCTANCE VALUES ARE IN μH(m=mH).
ALL E.CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE(μF)/RATED VOLTAGE (V).
ALL DIODES ARE 1SS119-041-T2 UNLESS SPECIFIED

TAPE P.B. SIGNAL
CD SIGNAL
TUNER SIGNAL

■Main circuit



1. ALL VALUES ARE MEASUED IN VOLTS ----- CD STOP MODE.

IC / PIN NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
IC901	5.2	0.4	0	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	7.4	0

2. UNLESS OTHERWISE SPECIFIED.
   ALL RESISTORS ARE 1/10W ±5% METAL GLAZE RESISTOR.
   ALL CAPACITORS ARE CERAMIC CAPACITOR OR MYLAR CAPACITOR.
   ALL RESISTANCE VALUES ARE IN OHM(Ω).
   ALL CAPACITANCE VALUES ARE IN ±F(P=pF).
   ALL INDUCTANCE VALUES ARE IN ±H(m=mH).
   ALL E-CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE(±F)/RATED VOLTAGE (V).
   ALL DIODES ARE 1SS119-041-T2 UNLESS SPECIFIED

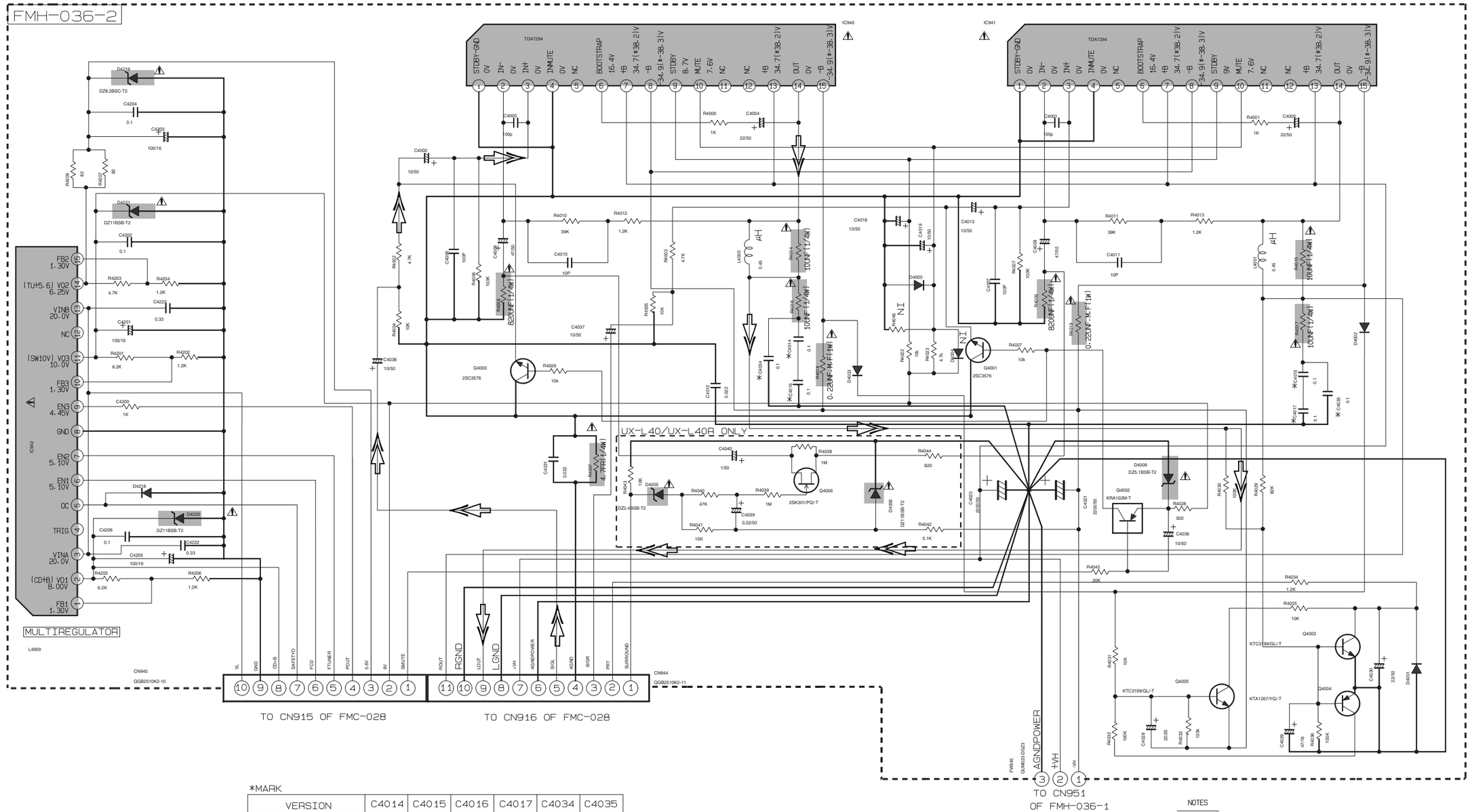
* PART LIST

PART / VERSION	L2500/L2501	B2052/B2053	CN918	L2800/L2801	B2091/B2092 B2093/B2094	K5022/L5030 L5033	B5022/B5030 B5033
B/E/EN/EV/A/UB	QQL231K-560Y	NONE	USE	QQR0797-001	NONE	USE	NONE
UF/UJ/UR/UT/UW/UY/US	QQL231K-560Y	NONE	NONE	QQR0797-001	NONE	USE	NONE
J/C	NONE	QUY150-050Y	NONE	NONE	QUY150-050Y	NONE	QUY150-050Y

⚠ Parts are safety assurance parts. When replacing those parts make sure to use the specified one.

TAPE P.B. SIGNAL
CD SIGNAL
TUNER SIGNAL
AUX IN SIGNAL
MAIN SIGNAL

■ Subwoofer circuit



*MARK

VERSION	C4014	C4015	C4016	C4017	C4034	C4035
J/C	X	X	X	X	O	O
UF/UP/US/UT/ UW/UY/UJ	O	O	O	O	X	X
A/B/E/EN/EV/UB	O	O	O	O	X	X

O = USED
X = NOT USED

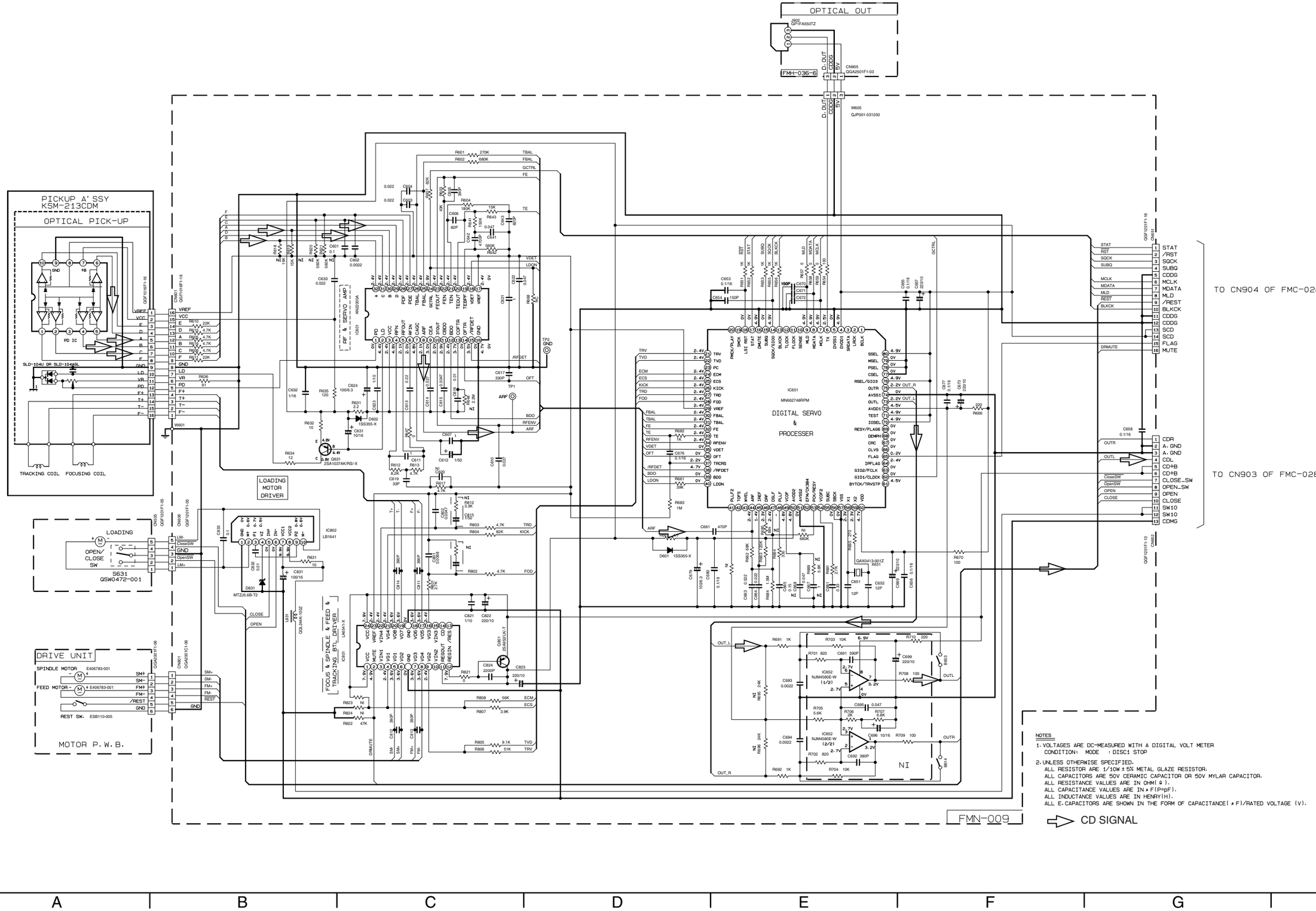
MAIN SIGNAL

⚠ Parts are safety assurance parts. When replacing those parts make sure to use the specified one.

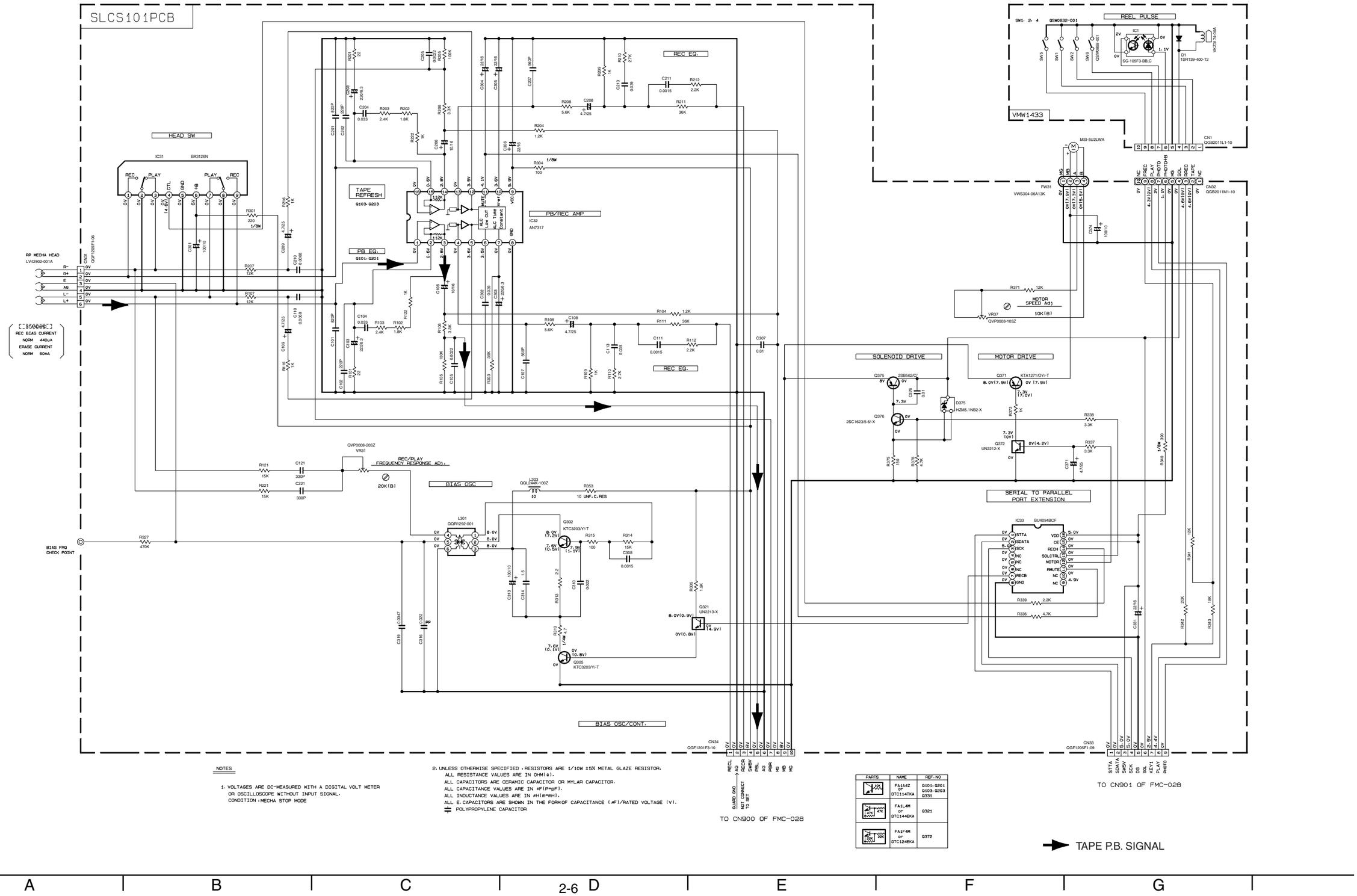
NOTES

1. VOLTAGES ARE DC-MEASURED USING A DIGITAL VOLTMETER OR AN OSCILLOSCOPE WITHOUT INPUT SIGNAL CONDITION
2. UNLESS OTHERWISE SPECIFIED
   ALL RESISTORS ARE 1/6W ± 5% CARBON RESISTOR.
   ALL CAPACITORS ARE 50V CERAMIC CAPACITOR OR 50V MYLAR CAPACITOR.
   ALL RESISTANCE VALUES ARE IN OHM(Ω).
   ALL CAPACITANCE VALUES ARE IN μF(P=pF).
   ALL E.CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE(μF)/RATED VOLTAGE (V).
   ALL DIODES ARE 1SS119-041-T2 TYPE UNLESS SPECIFIED
   (PP) POLYPROPYLENE CAPACITOR
   (M) 50V ± 5% MYLAR CAPACITOR OR 50V ± 5% THIN FILM CAPACITOR
3. THOSE PART WITH BRACKET IS NOT USED.
   FOR RESISTOR, IT WOULD BE A SHORT.
   FOR CAPACITOR, IT WOULD BE AN OPEN.

■CD servo circuit



■Cassette amplifier circuit



NOTES

1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER OR OSCILLOSCOPE WITHOUT INPUT SIGNAL.
   CONDITION : MECHA STOP MODE

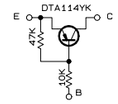
2. UNLESS OTHERWISE SPECIFIED · RESISTORS ARE 1/10W ±5% METAL GLAZE RESISTOR.
   ALL RESISTANCE VALUES ARE IN OHM(Ω).
   ALL CAPACITORS ARE CERAMIC CAPACITOR OR MYLAR CAPACITOR.
   ALL CAPACITANCE VALUES ARE IN μF(P=pF).
   ALL INDUCTANCE VALUES ARE IN μH(m=mH).
   ALL E. CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE (μF)/RATED VOLTAGE (V).
   POLYPROPYLENE CAPACITOR

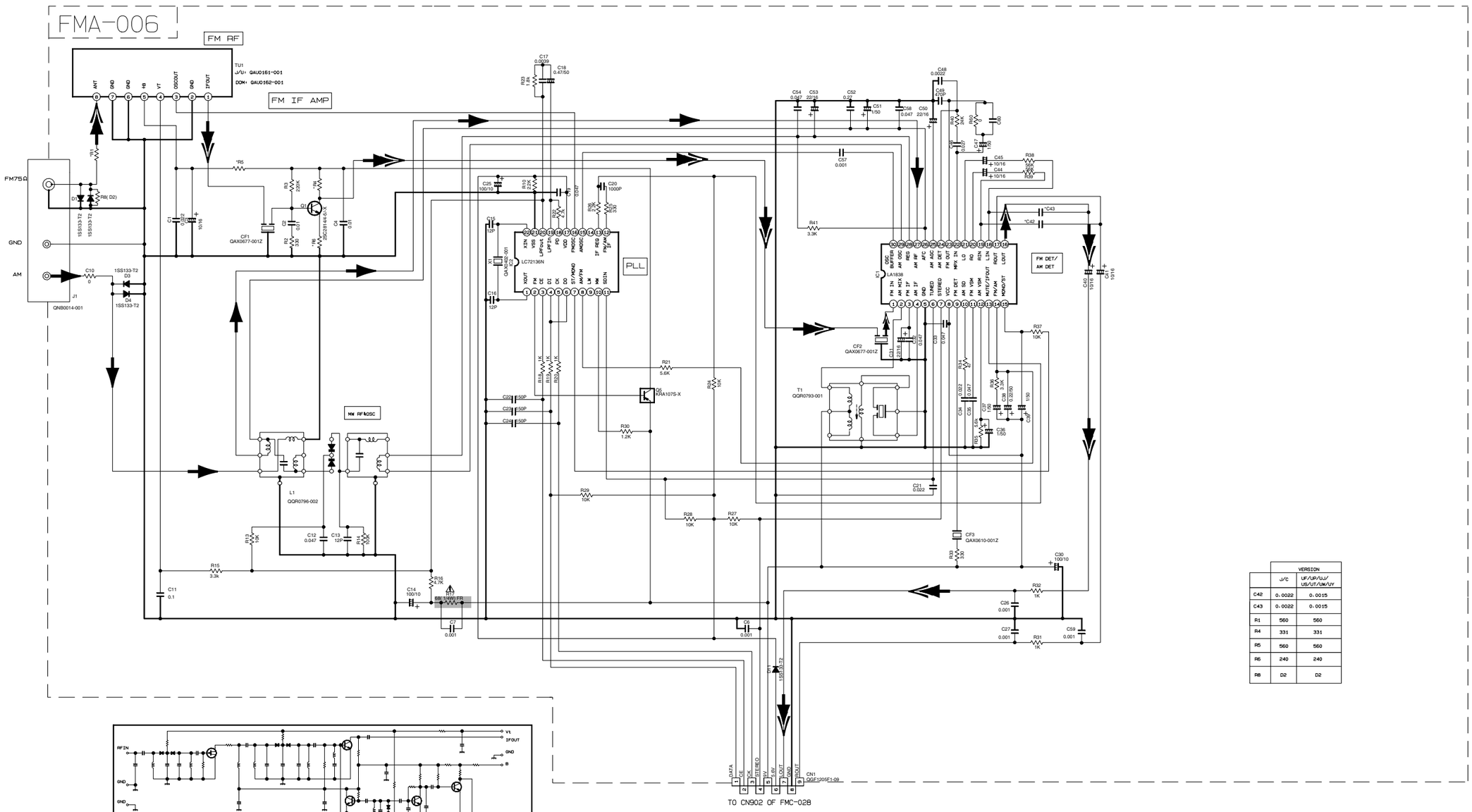
PARTS	NAME	REF. NO
100K 47K	FA1A4Z or DTC114TKA	G101- G201 G103- G203 G331
47K 47K	FA1L4M or DTC144EKA	G321
100K 100K	FA1F4M or DTC124EKA	G372

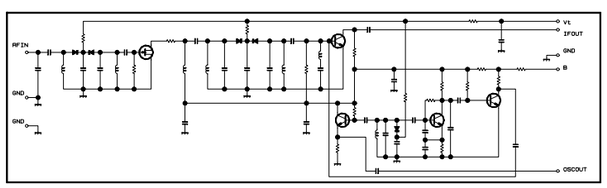
■Tuner circuit

NOTES

1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER.
2. ALL RESISTORS ARE 1/8W ±5% METAL GLAZE RESISTOR.
3. ALL RESISTANCE VALUES ARE IN OHM(Ω).
4. ALL CAPASITANCE VALUES ARE IN μF(P=pF).
5. ALL E.CAPASITORS ARE SHOWN IN THE FORM OF CAPASITANCE (μF)/RATED VOLTAGE (V).
6. SI DIODES (▶|) ARE ALL 1SS133-T THAT CAN BE CHANGED TO SIMILAR DIODE SUCH AS MA165 OR HSS104J.
7. PARTS NO. OF TRANSISTORS ARE AS FOLLOWS.
   Q1 2SC2814/4-5/-X Q2.Q3 2SC2412K/R/-X
   Q4.Q5 DTA114YKA-X
8. INSIDE OF DIGITAL TRANSISTORS ARE SHOWN AS FOLLOWS.







	CONDITION PIN NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
IC1	FM NO SIGNAL	3.6	8.9	3.6	3.6	0	5.0	5.0	8.9	8.9	1.3	0.1	0	0.9	7.8	7.8	4.3	4.3	4.3	4.3	3.4	3.4	2.8	3.4	0	0	3.5	3.5	3.6	3.6	2.7
	FM 60dB STEREO	3.6	8.9	3.6	3.6	0	0	5.0	8.9	8.9	1.3	4.3	0	0.9	7.8	7.8	4.3	4.3	4.3	4.3	3.4	3.4	2.8	3.4	0	0	3.6	3.6	3.6	3.6	2.7
	AM NO SIGNAL	3.5	9.0	3.5	3.5	0	5.0	5.1	9.0	2.6	1.3	0	0	0.9	4.7	5.5	4.3	4.3	4.3	4.3	3.3	3.2	2.8	ust	0.7	0.7	3.6	3.6	3.6	3.6	2.1
IC2	FM NO SIGNAL	2.5	0	0	5.0	4.9	5.0	7.9	7.8	3.6	6.1	5.1	0	0	0	0	2.5	5.1	0.9	0.9	3.8	0	2.3								

Tr NO.	Q1			Q5					
PIN NO.	E	C	B	E	C	B			
FM 87.5MHz NO SIGNAL	0	7.1	0.85	8.9	8.8	0			
AM 522KHz NO SIGNAL	0	0	0	9.0	0	8.9			
Tr NO.	Q2			Q3			Q4		
PIN NO.	E	C	B	E	C	B	E	C	B
AM 522KHz NO SIGNAL	0	0	0.7	0	0	0.7	0	3.6	0.7
AM 144KHz NO SIGNAL	0	0	0.3	0	0.3	0.3	3.6	3.6	3.6

	VERSION	
	J/C	UF/UP/UJ/ US/UT/UK/UY
C42	0.0022	0.0015
C43	0.0022	0.0015
R1	560	560
R4	331	331
R5	560	560
R6	240	240
R8	D2	D2

AM SIGNAL
FM/TUNER SIGNAL

⚠ Parts are safety assurance parts. When replacing those parts make sure to use the specified one.

■ Power supply circuit

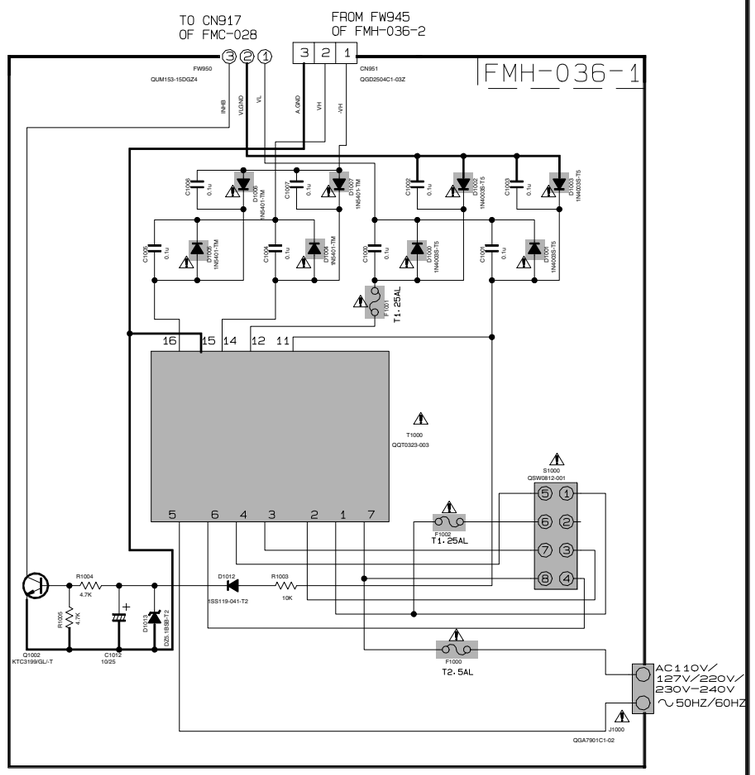
EXPLANATION OF OVERALL OF SCHEMATIC		
MODEL : FS-L30/UX-L30R/UX-L30/UX-L40R/UX-L40		
SHEET NUMBER	MODEL NUMBERS TO BE APPLIED	CIRCUITS DESCRIPTION
1/8	FS-L30/UX-L30R/UX-L30/UX-L40R/UX-L40	. PRIMARY WITH MAINS TRANSFORMER
2/8	FS-L30/UX-L30R/UX-L30/UX-L40R/UX-L40	. AUDIO OUTPUT . EXTERNAL INPUT
3/8	FS-L30/UX-L30R/UX-L30/UX-L40R/UX-L40	. LCD DISPLAY/SYSTEM CONTROL/USERS KEY CONTROL . SOURCE SELECTOR SWITCH
4/8	FS-L30/UX-L30R/UX-L30/UX-L40R/UX-L40	. CD SERVO AND CD SYSTEM CONTROL
5/8	FS-L30/UX-L30R/UX-L30/UX-L40R/UX-L40	. TAPE DECK MECHANISM CONTROL . TAPE CIRCUITS SUCH AS PRE-AMP AND BIAS
6/8	FS-L30/UX-L30/UX-L40	. TUNER RF/IF/FM MULTIPLEX (ONLY FOR J/C/UF/UJ/UP/US/UT/UW/UY)
7/8	UX-L30R/UX-L30/UX-L40R/UX-L40	. TUNER RF/IF/FM MULTIPLEX (ONLY FOR UB/A/B/E/EN/EV)
8/8	FS-L30/UX-L30R/UX-L30/UX-L40R/UX-L40	. POWER BOARD . MULTIREGULATOR

* NOTE : MARK( ) IS TO SHOW DEVIATION IN VERSIONS.
DETAILS ARE EXPLAINED NEAR MARK.

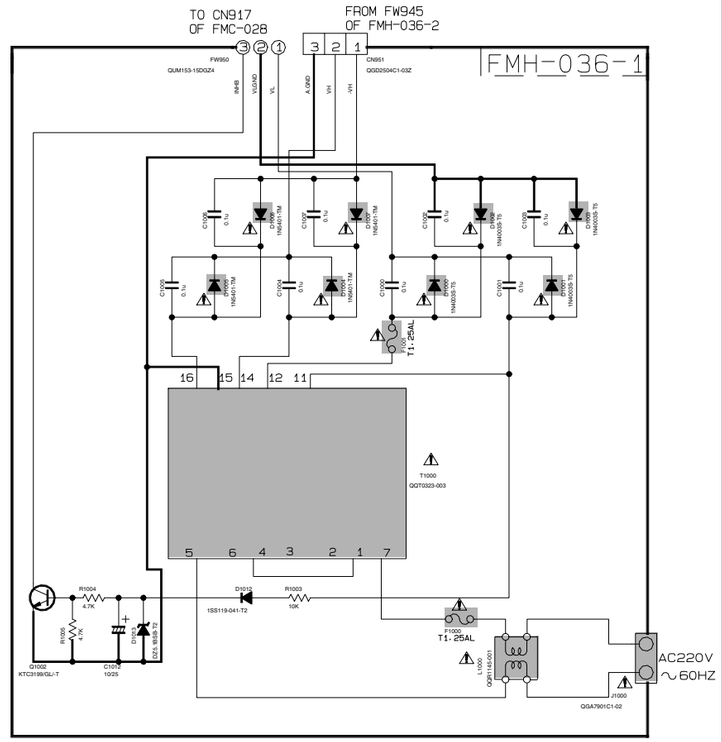
VERSION CODES

J	: USA
C	: CANADA
A	: AUSTRALIA
B	: U.K
E	: CONTINENTAL EUROPE
EN	: NORDIC COUNTRIES
EV	: EASTERN EUROPE & RUSSIA
UB	: HONG KONG
UF	: CHINA
UJ	: MILITARY
UP	: KOREA
UT	: TAIWAN
UW	: SOUTH AMERICA
UY	: ARGENTINA
US	: SINGAPORE AND UNIVERSAL EXCEPT ALL OF ABOVES

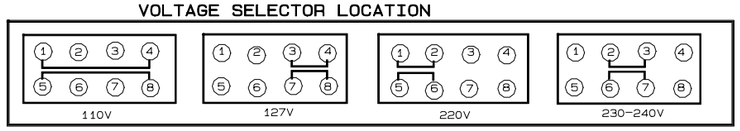
US/UT/UW/UY/UJ



UP



VOLTAGE SELECTOR LOCATION



NOTES

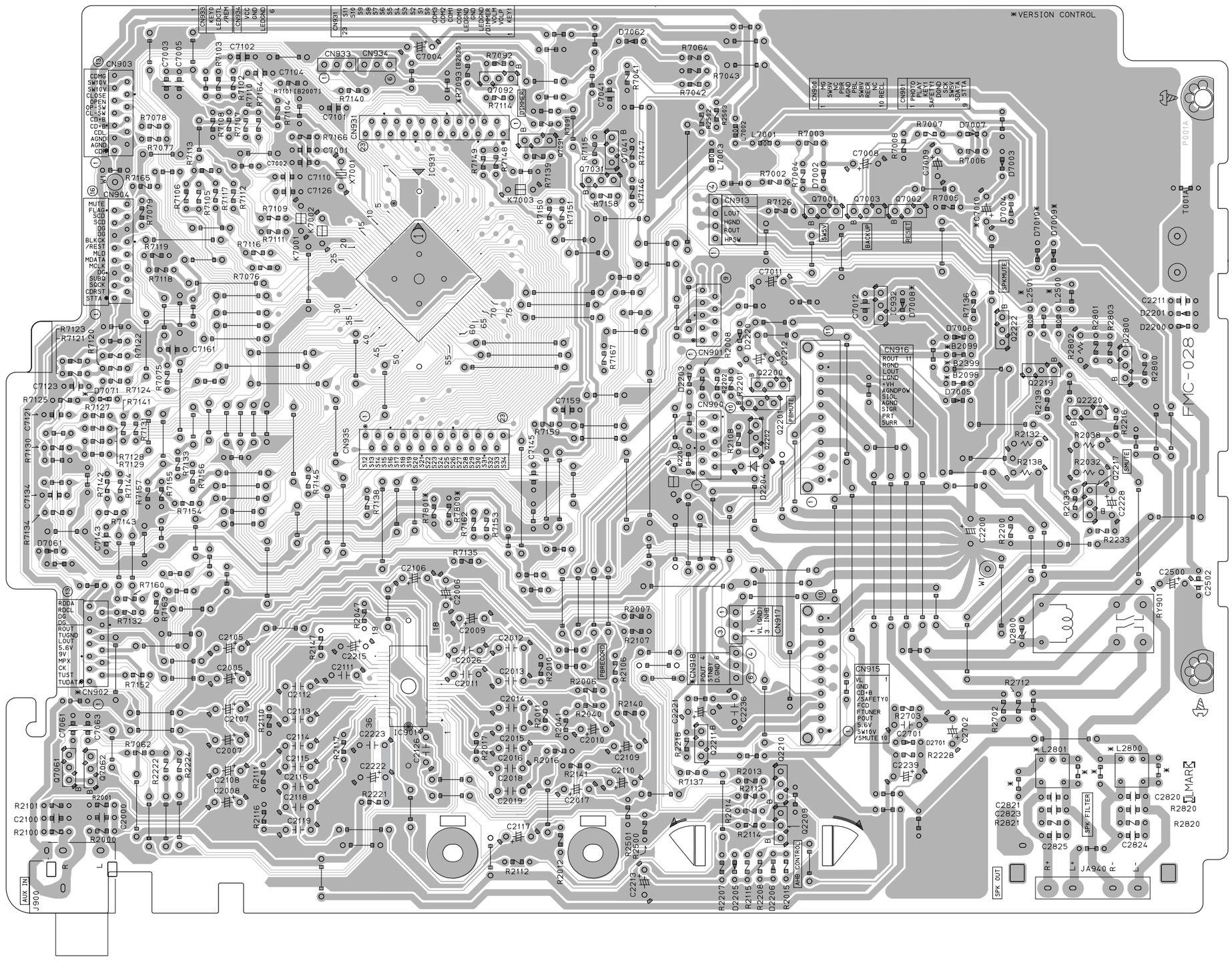
1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER OR OSCILLOSCOPE WITHOUT INPUT SIGNAL.
   INSIDE BRACKET VALUES ARE OTHER FUNCTIONS

2. UNLESS OTHERWISE SPECIFIED . RESISTORS ARE 1/6W ± 5% CARBON RESISTOR.
   ALL RESISTANCE VALUES ARE IN OHM(Ω).
   ALL CAPACITORS ARE CERAMIC CAPACITOR OR MYLAR CAPACITOR.
   ALL CAPACITANCE VALUES ARE IN ≠F(P=pF).
   ALL INDUCTANCE VALUES ARE IN ≠H(m=mH).
   ALL E.CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE (≠F)/RATED VOLTAGE (V).

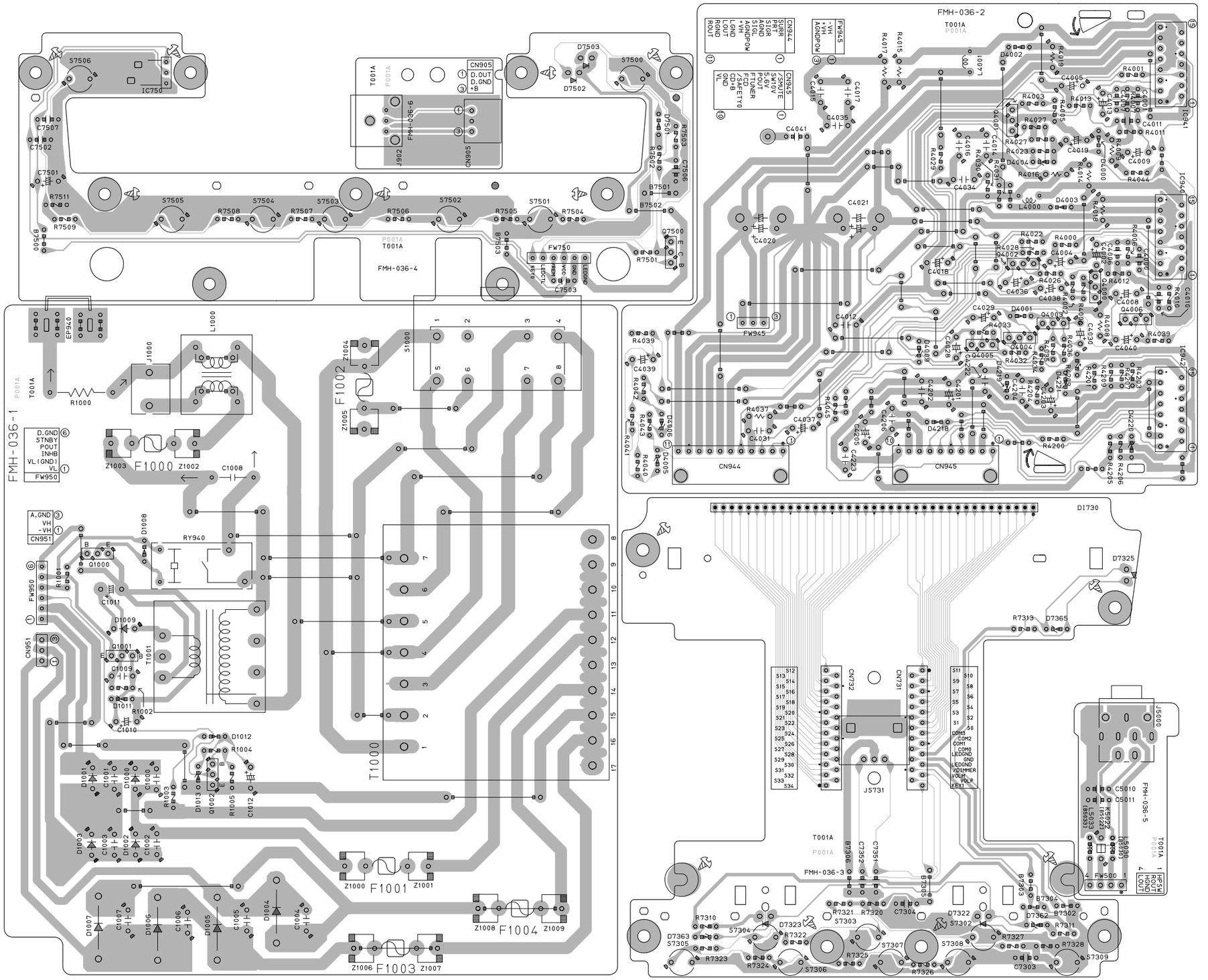
⚠ Parts are safety assurance parts. When replacing those parts make sure to use the specified one.

Printed circuit boards

■Main board



■Front board


FMH-036-1
FMH-036-2
FMH-036-3
FMH-036-4
FMH-036-5
FMH-036-6
T001A
P001A
CN905
D.OUT
D.GND
+B
S7506
IC750
S7505
S7504
S7503
S7502
S7501
S7500
D7503
D7502
R7511
R7509
R7508
R7507
R7506
R7505
R7504
R7503
R7502
R7501
C7507
C7502
C7501
C7506
B7501
B7502
B7503
Q7500
FW750
C7503
EP940
L1000
J1000
R1000
Z1004
Z1005
F1002
S1000
Z1003
F1000
Z1002
C1008
A.GND
VH
-VH
CN951
FW950
D.GND
STNBY
POUT
INHB
VL (GND)
VL
FW950
RY940
Q1000
R1001
C1011
D1009
Q1001
T1001
C1009
D1011
R1002
C1010
D1008
D1012
R1004
Q1002
R1005
C1012
D1001
D1002
D1003
D1004
D1005
D1006
D1007
C1001
C1002
C1003
C1004
C1005
C1006
C1007
R1003
T1000
Z1000
F1001
Z1001
Z1008
F1004
Z1009
Z1006
F1003
Z1007
CN944
CN945
FW945
L4001
L4000
D4002
D4003
D4004
D4000
D4001
D4005
D4006
D4218
C4020
C4021
C4041
C4035
C4017
C4015
C4005
C4001
C4003
C4027
C4029
C4034
C4036
C4038
C4037
C4031
C4039
C4040
C4044
C4009
C4011
C4012
C4018
C4019
C4028
C4222
C4201
C4202
C4204
C4206
C4205
C4223
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R4042
R4043
R4041
R4040
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R4045
R4000
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R4003
R4013
R4015
R4017
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R4029
R4016
R4014
R4034
R4022
R4028
R4002
R4026
R4012
R4008
R4006
R4010
R4033
R4032
R4035
R4036
R4030
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R4200
R4201
R4203
R4205
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R4207
R4208
R4209
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R4219
R4220
R4221
R4222
R4223
R4224
R4225
R4226
R4227
R4228
R4229
R4230
R4231
R4232
R4233
R4234
R4235
R4236
IC4001
IC4002
IC4003
Q4005
Q4006
Q4003
Q4004
D4220
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D4224
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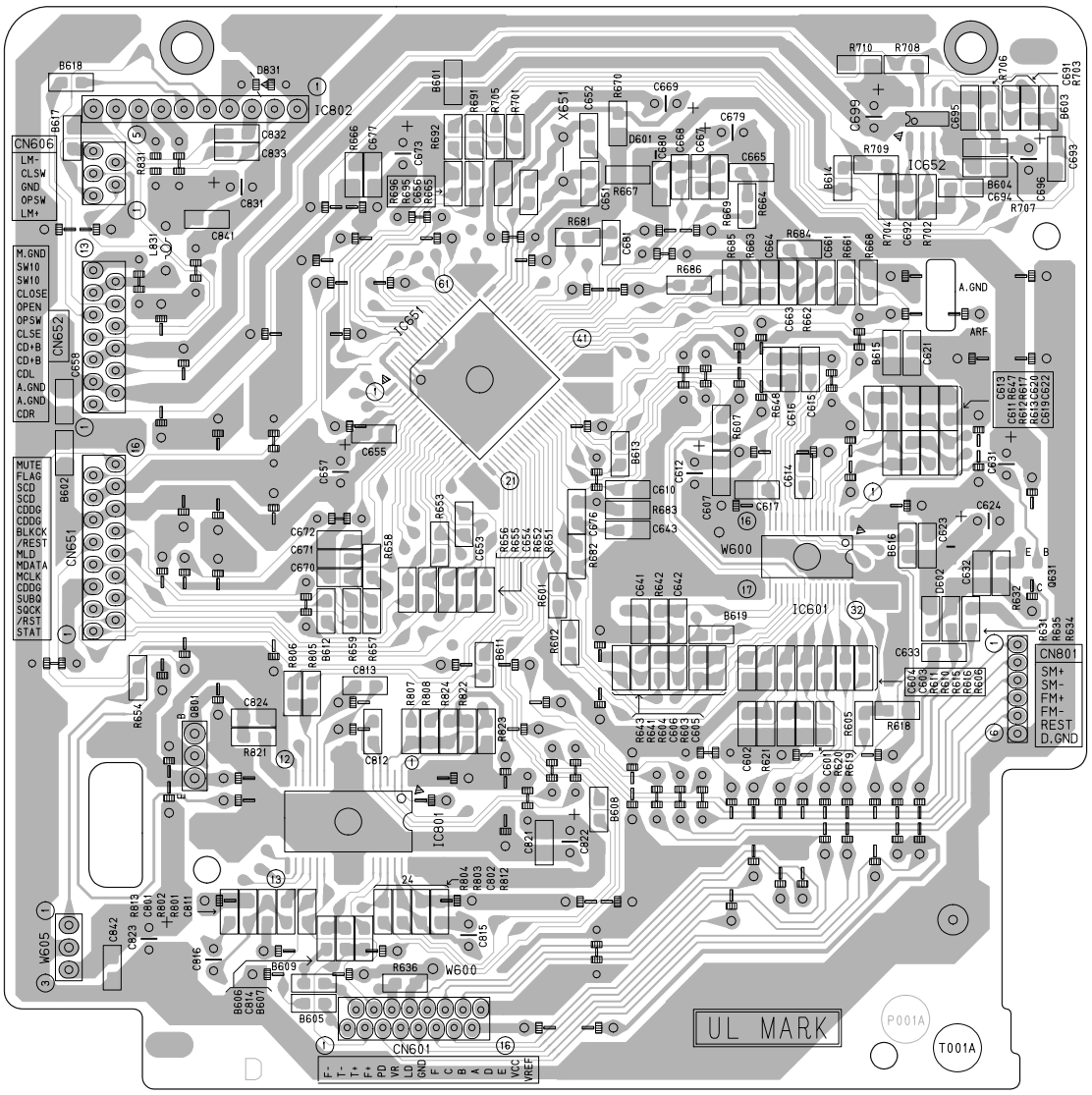
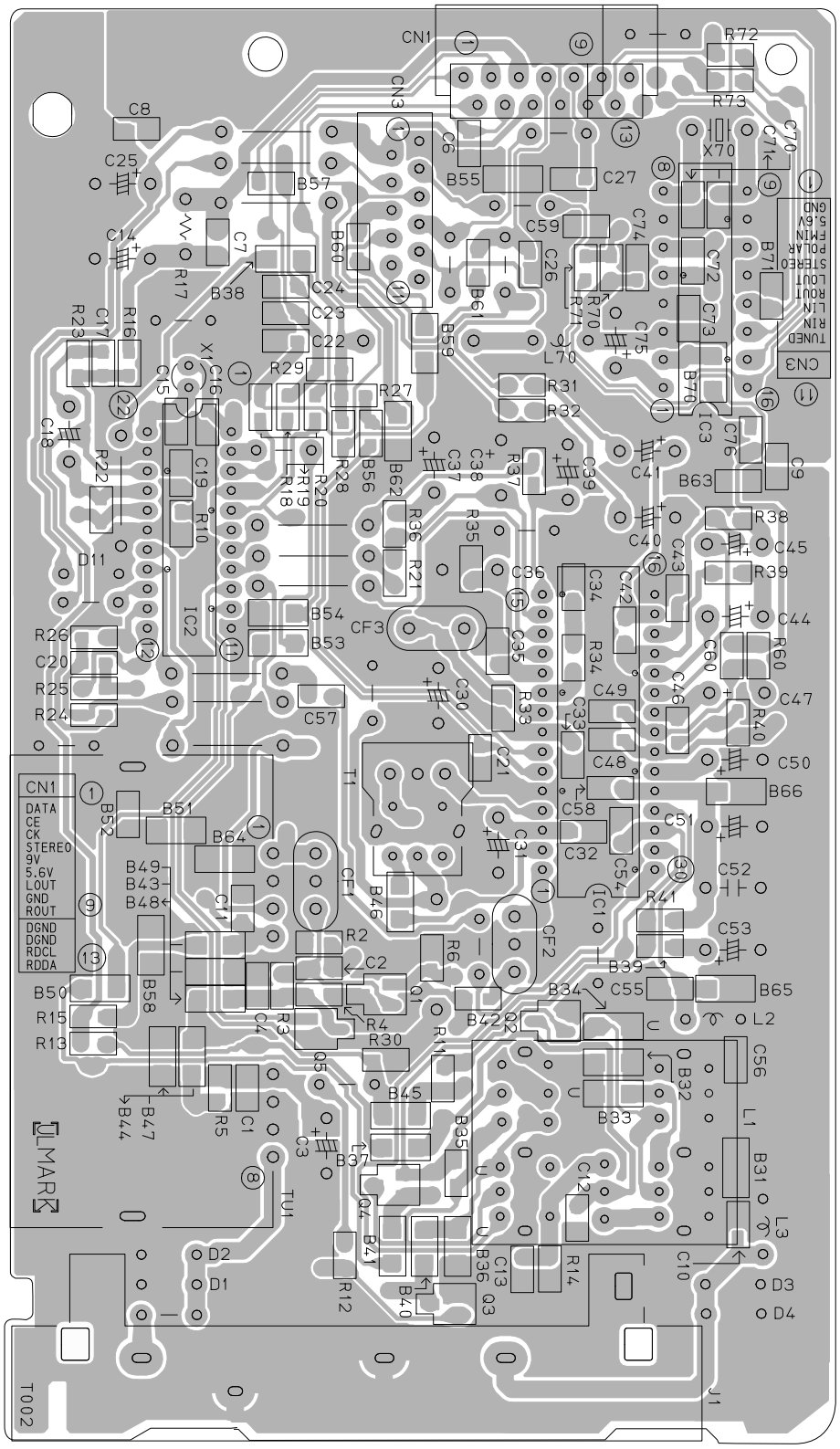
D4258
D4259

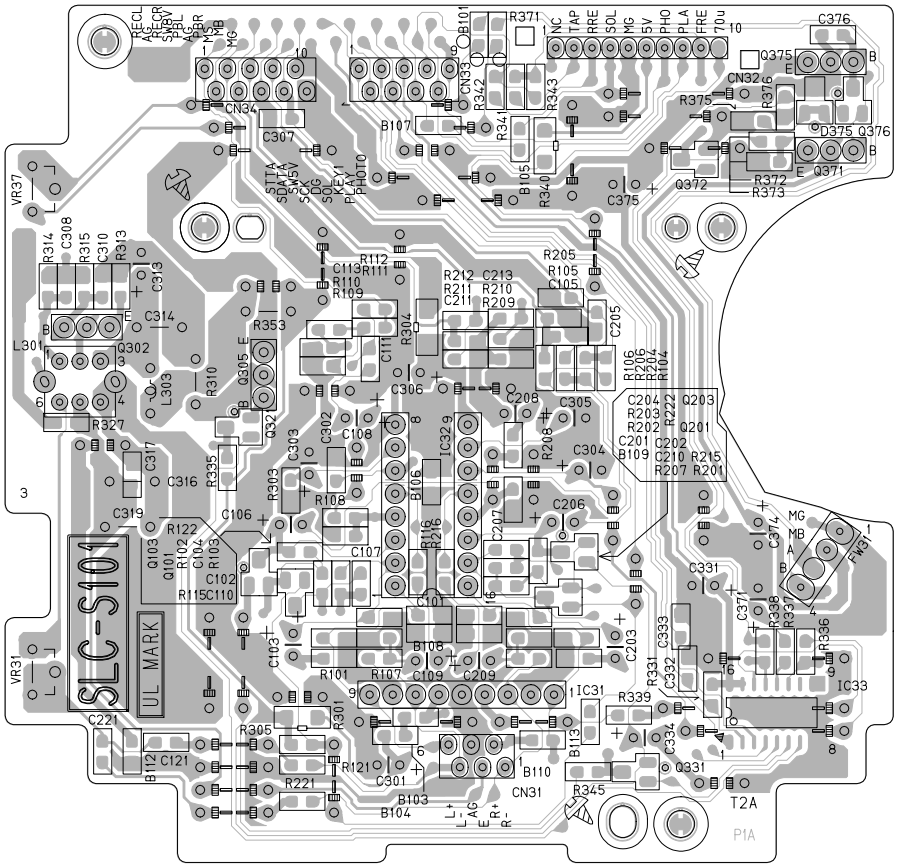
■CD servo board



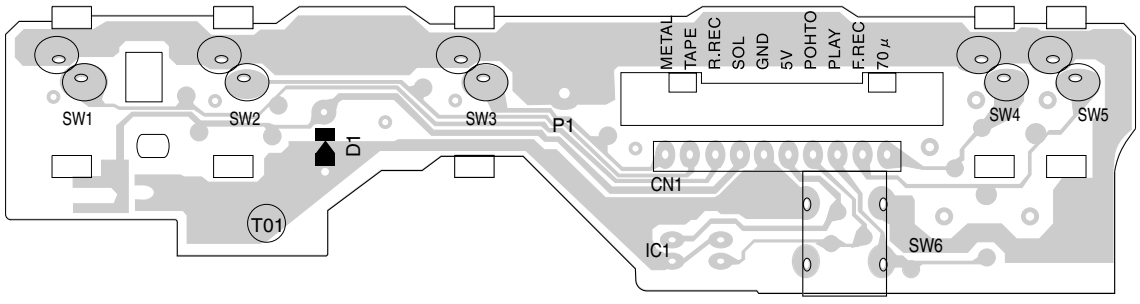
■ Tuner board


CN1
DATA
CE
CK
STEREO
9V
5.6V
LOUT
GND
ROUT
DGND
DGND
RDCL
RDDA
CN3
TUNED
RIN
LOUT
ROUT
STEREO
PULSE
FMIN
5.6V
GND
T002
TU1
IC1
IC2
IC3
CF1
CF2
CF3
T1
X1
X70
Q1
Q2
Q3
Q4
Q5
L1
L2
L3
L70
J1
D1
D2
D3
D4
D11

■ Head amplifier board



■ Cassette switch board



JVC

VICTOR COMPANY OF JAPAN, LIMITED
AUDIO & COMUNICATION BISINESS DIVISION
PERSONAL & MOBILE NETWORK BUSINESS UNIT. 10-1,1Chome,Ohwatari-machi,maebashi-city,371-8543,Japan

No.21105SCH

200207

PARTS LIST

[UX-L40]
[UX-L30]

* All printed circuit boards and its assemblies are not available as service parts.

UX-L40
Area suffix US ---------- Singapore UP ---------- Korea UW ---------- Brazil,Mexico,Peru

UX-L30
Area suffix US ---------- Singapore UP ---------- Korea UW ---------- Brazil,Mexico,Peru UJ ---------- U.S.Military

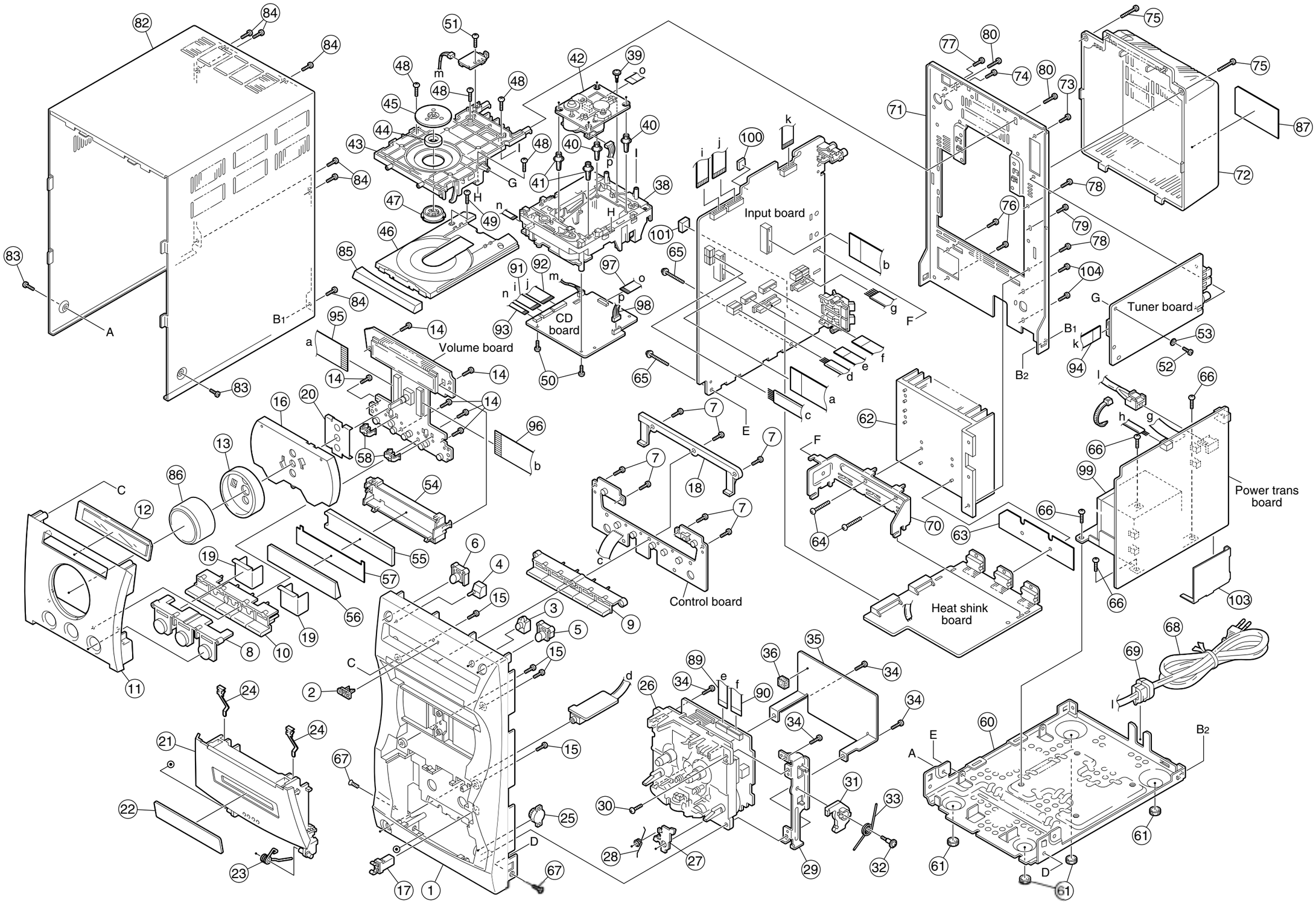
- Contents -

Exploded view of general assembly and parts list (Block No.M1) ---------- 3- 3
CD loading base assembly and parts list (Block No.MD) ---------- 3- 6
Cassette mechanism assembly and parts list (Block No.MP) ---------- 3- 8
Electrical parts list (Block No.01~06) ---------- 3-10
Packing materials and accessories parts list (Block No.M3,M5) ---------- 3-20

< MEMO >

Exploded view of general assembly and parts list

Block No. M 1 M M



■ Parts list (General assembly)

Block No. M1MM

⚠	Item	Parts number	Parts name	Q'ty	Description	Area
	1	GV10100-003A	FRONT PANEL	1		
	2	GV40077-002A	JVC BADGE	1		
	3	GV40272-001A	REMOTE LENS	1		
	4	GV40284-001A	LED LENS	1		
	5	GV40274-002A	EJECT BUTTON	1		
	6	GV40273-002A	POWER BUTTON	1		
	7	QYSDSF2610Z	TAPPING SCREW	7	F.PANEL/PWB	
	8	GV30264-002A	FUNC BUTTON ASSY	1		
	9	GV30265-001A	CONTROL BTN.A	1	UX-L30	
		GV30265-002A	CONTROL BTN.A	1	UX-L40	
	10	GV30266-002A	CONTROL BTN.B	1	UX-L40	
		GV30266-001A	CONTROL BTN.B	1	UX-L30	
	11	GV20161-002A	FRONT PLATE	1	UX-L30	
		GV20161-005A	FRONT PLATE	1	UX-L40	
	12	GV30274-001A	FRONT LENS	1		
	13	GV30262-001A	VOLUME ORNAMENT	1		
	14	QYSDSF2610Z	TAPPING SCREW	6	F.PLATE/PWB	
	15	QYSDSF2610Z	TAPPING SCREW	4	F.PLATE/F.PANEL	
	16	GV30267-002A	ILLUMI.LENS	1		
	17	GV40220-001A	LATCH	1		
	18	GV30338-001A	BASE HOLDER	1		
	19	GV40337-001A	OPAQUE SHEET	2		
	20	GV40331-001A	VOLUME SHEET	1		
	21	GV10101-001A	CASSETTE DOOR	1		
	22	GV40276-001A	DOOR LENS	1		
	23	GV40277-001A	DOOR SPRING	1		
	24	VKY4180-401	CASSETTE SPRING	2		
	25	GV40034-001A	DAMPER ASSY	1		
	26	----------	CASSETTE MECHA	1		
	27	VKL7850-002	EJECT SAFTY(R)	1		
	28	VKW5258-003	TORSION SPRING	1		
	29	GV30268-001A	MECHA BRACKET	1		
	30	QYSBSG3008Z	T.SCREW	1	M.BKT/SLC MECHA	
	31	GV40278-001A	SAFTY ARM	1		
	32	VKZ4341-204	SPECIAL SCREW	1	S.ARM/M.BRACKET	
	33	GV40279-001A	ARM SPRING	1		
	34	QYSBSF3012Z	SCREW	4	SLC./F.PANEL	
	35	GV30124-002A	TRANS SHIELD	1		
	36	GV40170-003A	SPACER	1	SLC(MOTOR)/T.SHIELD	
	38	----------	LOAD.BASE ASSY.	1		
	39	E406293-001	SPECIAL SCREW	1	CD MECHA/LOAD.BASE	
	40	GV40196-001A	INSULATOR	2		
	41	GV40196-002A	INSULATOR	2		
	42	KSM-213CCMJ	CD MECHA ASSY.	1		
	43	GV10102-002A	CLAMPER BASE	1		
	44	VYH7313-005	MAGNET	1		
	45	E306836-223SS	CD YOKE	1		
	46	VYH1240-001	TRAY	1		

UX-L40/UX-L30

■ Parts list (General assembly)

Block No. M1MM

⚠	Item	Parts number	Parts name	Q'ty	Description	Area
	47	GV30202-001A	CD CLAMPER	1		
	48	QYSBSF3008Z	SCREW	4	CLAMP.BASE/LOAD	
	49	QYSBSF3008Z	SCREW	1	CD TRAY STOPPER	
	50	QYSBSF3008Z	SCREW	2	CD BRD/LOAD.ASSY	
	51	QYSBSF3008Z	SCREW	1	OPTICAL BRD./C.	
	52	QYSDSF2610Z	TAPPING SCREW	1	TUNER/C.BASE ASSY	
	53	GV40122-003A	SPACER	1		
	54	GV30270-001A	LCD HOLDER	1		
	55	GV40280-001A	LCD LENS(A)	1		
	56	GV40281-002A	LCD LENS(B)	1		
	57	GV40282-001A	LCD SHEET	1		
	58	GV40283-001A	LED HOLDER	2		
	60	GV10103-001A	BOTTOM CHASSIS	1		
	61	GV40312-002A	FOOT SPACER	4	CHAS.BASE FOOT	
	62	GV30272-001A	HEAT SINK	1		
	63	GV40326-001A	MICA SHEET	1		
	64	QYSBSF3014Z	SCREW	2	IC HOL./H.SINK	
	65	QYSBSFG3016Z	SCREW	2	PWB BRD/CHA.BASE	
	66	QYSBST4006Z	T.SCREW	4	TRANS/CHA.BASE	
	67	QYSSST3008Z	SCREW	2	F.PANEL/C.BASE	
⚠	68	QMPR310-200-JC	POWER CORD	1		UP
⚠		QMPK200-200-JD	POWER CORD	1	UX-L30	US,UJ,UW
⚠		QMPK210-205-JN	POWER CORD	1	UX-L40	US,UW
⚠	69	QZW0033-001	STRAIN RELIEF	1		
	70	GV30271-002A	IC HOLDER	1		
	71	GV10104-001A	REAR PANEL	1		UP
		GV10104-002A	REAR PANEL	1		US,UJ,UW
	72	GV10105-006A	REAR COVER	1		
	73	QYSBSGY3008E	SPECIAL SCREW	1	ANT.TEM/R.PANEL	
	74	QYSBSGY3008E	SPECIAL SCREW	1	AUX.TEM/R.PANEL	
	75	QYSBSGY3010E	SPECIAL SCREW	2	R.COVER/R.PANEL	
	76	QYSBSGY3008E	SPECIAL SCREW	2	SPEAKER/R.PANEL	
	77	QYSBSGY3008E	SPECIAL SCREW	1	OPT.OUT/R.PANEL	
	78	QYSBSGY3008E	SPECIAL SCREW	2	R.PANEL/H.SINK	
	79	QYSBSGY3008E	SPECIAL SCREW	1	R.PANEL/GROUND	
	80	QYSBSGY3008E	SPECIAL SCREW	2	R.PNL/C.BASE ASSY	
	82	GV10106-003A/S/	METAL COVER	1		
	83	QYSDSG3006M	T.SCREW	2	M.COVER/C.BASE	
	84	QYSBSGY3008E	SPECIAL SCREW	6	M.COVER/R.PANEL	
	85	GV30269-001A	CD FITTING	1		
	86	GV30261-001A	VOLUME KNOB(B)	1	UX-L40	
		GV30260-002A	VOLUME KNOB	1	UX-L30	
	87	GV30276-006A	RATING LABEL	1	UX-L30	UP
		GV30276-007A	RATING LABEL	1	UX-L30	US,UJ,UW
		GV30318-007A	RATING LABEL	1	UX-L40	US,UW
		GV30318-006A	RATING LABEL	1	UX-L40	UP
	89	QUQH12-0914AJ	CARD WIRE	1	UX-L40 FC33	
		QUQ412-0914CJ	CARD WIRE	1	UX-L30 FC33	

■ Parts list (General assembly)

Block No. M1MM

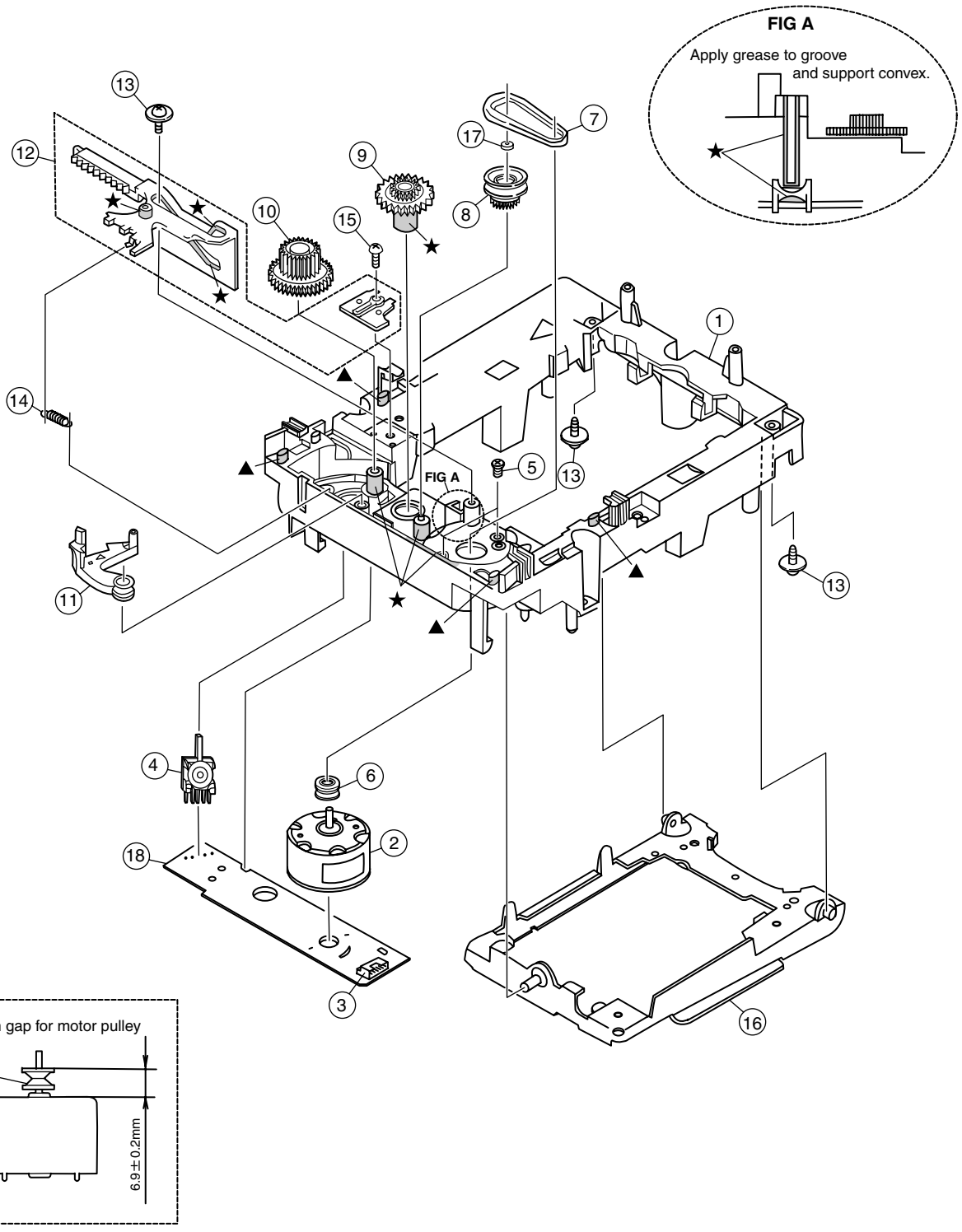
⚠	Item	Parts number	Parts name	Q'ty	Description	Area
	90	QUQH12-1018AJ	CARD WIRE	1	UX-L40 FC34	
		QUQ412-1018CJ	CARD WIRE	1	UX-L30 FC34	
	91	QUQH12-1314BJ	CARD WIRE	1	UX-L40 FC652	
		QUQ412-1314DJ	CARD WIRE	1	UX-L30 FC652	
	92	QUQ412-1614DJ	CARD WIRE	1	UX-L30 FC651	
		QUQH12-1614BJ	CARD WIRE	1	UX-L40 FC651	
	93	QUQH12-0507BJ	CARD WIRE	1	UX-L40 FC631	
		QUQ412-0507DJ	CARD WIRE	1	UX-L30 FC631	
	94	QUQ412-0932DJ	CARD WIRE	1	UX-L30 FC1	
		QUQH12-0932BJ	CARD WIRE	1	UX-L40 FC1	
	95	QUQ412-2314CJ	CARD WIRE	1	UX-L30 FC731	
		QUQH12-2314AJ	CARD WIRE	1	UX-L40 FC731	
	96	QUQH12-2320AJ	CARD WIRE	1	UX-L40 FC732	
		QUQ412-2320CJ	CARD WIRE	1	UX-L30 FC732	
	97	QUQ110-1609AJ	CARD WIRE	1	FC601	
	98	QJJ010-060801	SIN CR C-C WIRE	1	W801	
⚠	99	QQT0323-003	POWER TRANSF	1	T1000	
	100	GV30349-001A	SPACER	1	UX-L40	
	101	GV40170-003A	SPACER	1	FOR C2200	
	103	GV40322-001A	PROTECT SHEET A	1		US,UJ,UW
	104	QYSBSF3012E	SPECIAL SCREW	2	VOL.SEL/R.PANEL	US,UJ,UW

CD loading base assembly and parts list

Block No. M D M M

LOAD-JEM-2M

Grease
★ = G-474C
▲ = EBS0006-009B



■ Parts list (CD loading base)

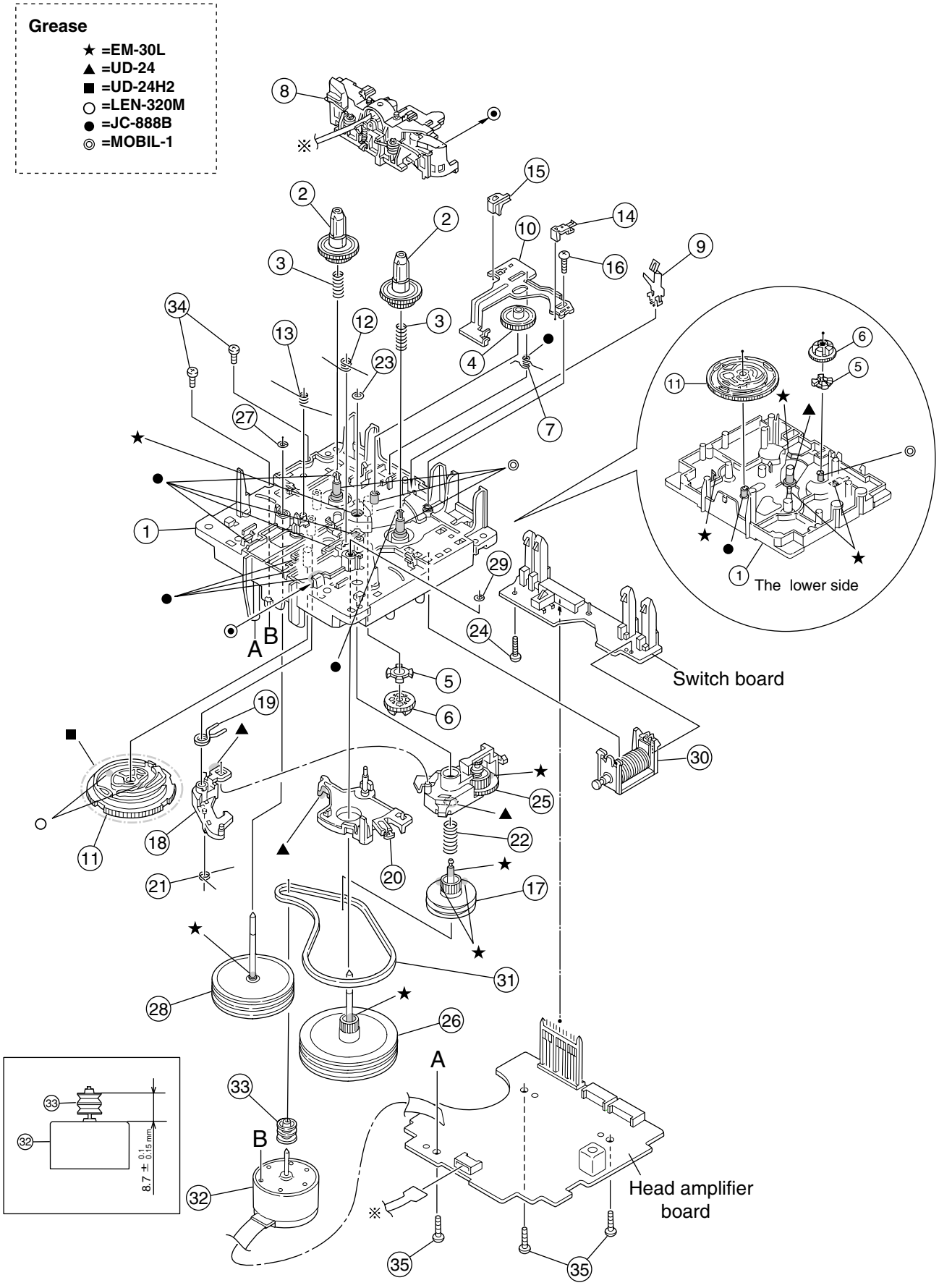
Block No. MDMM

⚠	Item	Parts number	Parts name	Q'ty	Description	Area
	1	VYH1238-001	LODING BASE	1		
	2	MMN-6F1LB8K	MOTOR	1		
	3	QGF1201F3-05	CONNECTOR	1	CN505	
	4	QSW0472-001	SWITCH	1	S851	
	5	QYSPSPT2640Z	MINI SCREW	2		
	6	E75984-221SS	C.D M.PULLEY	1		
	7	E75950-002	BELT	1		
	8	E75985-221SS	C.D GEAR (1)	1		
	9	E75986-221SS	C.D GEAR (2)	1	PBT	
	10	E75987-221SS	C.D GEAR (3)	1		
	11	E307162-331SS	LEVER	1		
	12	E307252-331SS	CAM PLATE	1		
	13	E65923-003	TAPPING SCREW	1		
	14	VYH7787-001	LEAF SPRING	1		
	15	QYSBSF3008Z	TAPPING SCREW	1		
	16	E307179-222SM	E.BASE ASS'Y	1		
	17	E60912-005SS	SPEED NUT	1		
	18	VMW1329-102	PRINTED BOARD	1		

Cassette mechanism assembly and parts list

Block No. M P M M

SLC-S101M



■ Parts list (Cassette mechanism)

Block No. MPMM

⚠	Item	Parts number	Parts name	Q'ty	Description	Area
	1	VKS1165-00J	CHASSIS B.ASS'Y	1		
	2	VKS2274-002	REEL GEAR	2		
	3	VKW5286-002	B.T. SPRING	2		
	4	VKS5559-001	PLAY IDLE GEAR	1		
	5	VKS5595-002	BLIND	1		
	6	VKS5560-003	FR IDLE GEAR	1		
	7	LV42013-001A	EARTH SPRING	1		
	8	SLC-RP3SVM	HEAD MOUNT	1		
	9	VKY3149-002	CASSETTE SP.	1		
	10	LV31786-001A	PLAY SW LEVER	1		
	11	VKS1166-004	CONTROL CAM	1		
	12	VKW5279-002	HEAD BASE SP(R)	1		
	13	VKW5280-001	HEAD BASE SP(L)	1		
	14	LV41584-001A	BRAKE(R)	1		
	15	LV41585-002A	BRAKE(L)	1		
	16	QYSBSF2005Z	T.SCREW	1		
	17	VKS5603-00G	MAIN PULLEY ASY	1		
	18	VKS3785-001MM	FR ARM	1		
	19	VKW5284-002	SWING SPRING	1		
	20	VKS2278-003	TRIGGER ARM	1		
	21	VKW5301-001	FR SPRING	1		
	22	VKW5266-001	ELEVATOR SPRING	1		
	23	WDL214025	WASHER	1		
	24	QYSBSF2005Z	T.SCREW	1		
	25	VKS3786-00G	CLUTCH ASS'Y	1		
	26	VKF3205-00B	F.WHEEL ASSY(R)	1		
	27	WDL183425	SLIT WASHER	1		
	28	VKF3207-00B	F.WHEEL ASSY(L)	1		
	29	WDL173525-6	SLIT WASHER	1		
	30	VKZ3174-00A	DC SOLENOID	1		
	31	LV42836-001A	CAPSTAN BELT	1		
	32	MSI-5U2LWA	D.C.MOTOR ASS'Y	1		
	33	VKR4761-001	MOTOR PULLEY	1		
	34	QYSPSP2604Z	SCREW	2		
	35	QYSBSF2608Z	T.SCREW	3	FOR P.W.B.	

■ **Electrical parts list (Input board)** **Block No. 01**

⚠	Item	Parts number	Parts name	Remarks	Area
	CN900	QGF1201C3-10	CONNECTOR	SLC	
	CN901	QGF1205C1-09	CONNECTOR	SLC	
	CN902	QGF1205F1-09	CONNECTOR	TU(ALL BUT E&B)	
	CN903	QGF1205F1-13	CONNECTOR	CD	
	CN904	QGF1205F1-16	CONNECTOR	CD	
	CN913	QGD2504C1-04Z	SOCKET	H/PHONE	
	CN915	QGB2510J1-10	CONNECTOR	POWER AMP	
	CN916	QGB2510J1-11	CONNECTOR	POWER AMP	
	CN917	QGD2504C1-03Z	SOCKET	TRANSFORMER	
	CN931	QGF1205C1-23	CONNECTOR	TO FRONT PANEL	
	CN933	QGD2504C1-03Z	SOCKET	TO FRONT PANEL	
	CN934	QGD2504C1-03Z	SOCKET	TO FRONT PANEL	
	CN935	QGF1205C1-23	CONNECTOR	TO FRONT PANEL	
	C2000	QCBB1HK-221Y	C CAPACITOR	220PF 10% 50V	
	C2005	QETC1HM-475Z	E CAPACITOR	4.7MF 20% 50V	
	C2006	QETC1HM-475Z	E CAPACITOR	4.7MF 20% 50V	
	C2007	QETC1HM-106Z	E CAPACITOR	10MF 20% 50V	
	C2008	QETC1HM-475Z	E CAPACITOR	4.7MF 20% 50V	
	C2009	QTE1V06-106Z	E CAPACITOR		
	C2010	QTE1V06-106Z	E CAPACITOR		
	C2011	QFLM1HJ-272Z	M CAPACITOR	2700PF 5% 50V	
	C2012	QFLM1HJ-104Z	M CAPACITOR	.10MF 5% 50V	
	C2013	QFLM1HJ-104Z	M CAPACITOR	.10MF 5% 50V	
	C2014	QFVJ1HJ-184Z	MF CAPACITOR	.18MF 5% 50V	
	C2015	QFVJ1HJ-184Z	MF CAPACITOR	.18MF 5% 50V	
	C2016	QFVJ1HJ-154Z	MF CAPACITOR	.15MF 5% 50V	
	C2017	QETC1CM-226Z	E CAPACITOR	22MF 20% 16V	
	C2018	QFVJ1HJ-154Z	MF CAPACITOR	.15MF 5% 50V	
	C2019	QFVJ1HJ-274Z	MF CAPACITOR	.27MF 5% 50V	
	C2026	QFLM1HJ-123Z	M CAPACITOR	.012MF 5% 50V	
	C2100	QCBB1HK-221Y	C CAPACITOR	220PF 10% 50V	
	C2105	QETC1HM-475Z	E CAPACITOR	4.7MF 20% 50V	
	C2106	QETC1HM-475Z	E CAPACITOR	4.7MF 20% 50V	
	C2107	QETC1HM-106Z	E CAPACITOR	10MF 20% 50V	
	C2108	QETC1HM-475Z	E CAPACITOR	4.7MF 20% 50V	
	C2109	QTE1V06-106Z	E CAPACITOR		
	C2110	QTE1V06-106Z	E CAPACITOR		
	C2111	QFLM1HJ-272Z	M CAPACITOR	2700PF 5% 50V	
	C2112	QFLM1HJ-104Z	M CAPACITOR	.10MF 5% 50V	
	C2113	QFLM1HJ-104Z	M CAPACITOR	.10MF 5% 50V	
	C2114	QFVJ1HJ-184Z	MF CAPACITOR	.18MF 5% 50V	
	C2115	QFVJ1HJ-184Z	MF CAPACITOR	.18MF 5% 50V	
	C2116	QFVJ1HJ-154Z	MF CAPACITOR	.15MF 5% 50V	
	C2117	QETC1CM-226Z	E CAPACITOR	22MF 20% 16V	
	C2118	QFVJ1HJ-154Z	MF CAPACITOR	.15MF 5% 50V	
	C2119	QFVJ1HJ-274Z	MF CAPACITOR	.27MF 5% 50V	
	C2126	QFLM1HJ-123Z	M CAPACITOR	.012MF 5% 50V	
	C2200	QETM1EM-228	E CAPACITOR	2200MF 20% 25V	
	C2211	QDYB1CM-103Y	C CAPACITOR		
	C2212	QETC1HM-106Z	E CAPACITOR	10MF 20% 50V	
	C2213	QETN1CM-106Z	E CAPACITOR	10MF 20% 16V	
	C2215	QETN1CM-226Z	E CAPACITOR	22MF 20% 16V	
	C2221	QETN1AM-107Z	E CAPACITOR	100MF 20% 10V	
	C2222	QETN1CM-107Z	E CAPACITOR	100MF 20% 16V	
	C2223	QFLM1HJ-104Z	M CAPACITOR	.10MF 5% 50V	
	C2228	QETN1HM-475Z	E CAPACITOR	4.7MF 20% 50V	
	C2236	QFLM1HJ-104Z	M CAPACITOR	.10MF 5% 50V	
	C2239	QETN1HM-105Z	E CAPACITOR	1.0MF 20% 50V	
	C2500	QETN1HM-106Z	E CAPACITOR	10MF 20% 50V	
	C2502	QDYB1CM-103Y	C CAPACITOR		
	C2504	QDGB1HK-102Y	C CAPACITOR		
	C2701	QFVJ1HJ-184Z	MF CAPACITOR	.18MF 5% 50V	
	C2702	QETN1HM-105Z	E CAPACITOR	1.0MF 20% 50V	

⚠	Item	Parts number	Parts name	Remarks	Area
	C2820	QCBB1HK-222Y	C CAPACITOR	2200PF 10% 50V	
	C2821	QCBB1HK-222Y	C CAPACITOR	2200PF 10% 50V	
	C2822	QCBB1HK-473Y	C CAPACITOR	.047MF 10% 50V	
	C2823	QCBB1HK-473Y	C CAPACITOR	.047MF 10% 50V	
	C2824	QCBB1HK-473Y	C CAPACITOR	.047MF 10% 50V	
	C2825	QCBB1HK-473Y	C CAPACITOR	.047MF 10% 50V	
	C7001	QCSB1HJ-150Y	C CAPACITOR	15PF 5% 50V	
	C7002	QCSB1HJ-120Y	C CAPACITOR	12PF 5% 50V	
	C7003	QDGB1HK-102Y	C CAPACITOR		
	C7004	QETN1AM-107Z	E CAPACITOR	100MF 20% 10V	
	C7005	QDYB1CM-103Y	C CAPACITOR		
	C7008	QETN0JM-228Z	E CAPACITOR	2200MF 20% 6.3V	
	C7009	QETN1HM-225Z	E CAPACITOR	2.2MF 20% 50V	
	C7010	QETN1HM-475Z	E CAPACITOR	4.7MF 20% 50V	
	C7011	QETN1CM-107Z	E CAPACITOR	100MF 20% 16V	
	C7012	QCFB1HZ-104Y	C CAPACITOR	.10MF +80:-20%	
	C7041	QDYB1CM-103Y	C CAPACITOR		
	C7061	QCBB1HK-151Y	C CAPACITOR	150PF 10% 50V	
	C7063	QCBB1HK-151Y	C CAPACITOR	150PF 10% 50V	
	C7101	QCFB1HZ-104Y	C CAPACITOR	.10MF +80:-20%	
	C7102	QCFB1HZ-104Y	C CAPACITOR	.10MF +80:-20%	
	C7104	QCFB1HZ-104Y	C CAPACITOR	.10MF +80:-20%	
	C7110	QDGB1HK-102Y	C CAPACITOR		
	C7121	QCBB1HK-101Y	C CAPACITOR	100PF 10% 50V	
	C7123	QCBB1HK-151Y	C CAPACITOR	150PF 10% 50V	
	C7126	QDYB1CM-103Y	C CAPACITOR		
	C7134	QCBB1HK-101Y	C CAPACITOR	100PF 10% 50V	
	C7143	QCBB1HK-101Y	C CAPACITOR	100PF 10% 50V	
	C7145	QDGB1HK-102Y	C CAPACITOR		
	C7159	QDYB1CM-103Y	C CAPACITOR		
	C7161	QCBB1HK-101Y	C CAPACITOR	100PF 10% 50V	
	D2200	1SS119-041-T2	SI DIODE	FREEWHEEL DIODE	
	D2201	1SS119-041-T2	SI DIODE	FREEWHEEL DIODE	
	D2203	1SS119-041-T2	SI DIODE	SW8V (SLC)	
	D2204	1N4003S-T5	SI DIODE	SW10V (SLC)	
	D2205	1SS119-041-T2	SI DIODE		
	D2206	1SS119-041-T2	SI DIODE		
	D2220	DZ6.8BSB-T2	Z DIODE		
	D2701	1SS119-041-T2	SI DIODE		
⚠	D2800	DZ24BSC-T2	DIODE		
	D7002	1SS119-041-T2	SI DIODE		
	D7003	1SS119-041-T2	SI DIODE	RESET	
	D7004	1SS119-041-T2	SI DIODE	BACK UP	
	D7005	1SS119-041-T2	SI DIODE	US5V	
	D7006	1SS119-041-T2	SI DIODE		
	D7007	DZ5.1BSB-T2	Z DIODE		
	D7008	DZ8.2BSB-T2	Z DIODE	L	
	D7061	1SS119-041-T2	SI DIODE		
	D7062	1SS119-041-T2	SI DIODE		
	IC901	LC75345M-X	IC		
	IC931	MN101C38CEK2	IC	SYSTEM MICOM	
	IC932	KIA78S06P-T	IC	US6V REG	
	IH901	VYH7653-003	IC HOLDER		
	IH931	VYH7653-001	IC HOLDER	FOR IC931	
	J 900	QNN0215-001	PIN JACK		
	JA940	QNB0117-001	SPK TERMINAL		
	K2200	QQR0621-001Z	FERRITE BEADS		
	K7001	QQR0621-001Z	FERRITE BEADS		
	K7002	QQR0621-001Z	FERRITE BEADS		
	L2500	QQL231K-820Y	INDUCTOR		
	L2501	QQL231K-820Y	INDUCTOR		
	L2800	QQR0797-001	INDUCTOR	SPK EMI FILTER	
	L2801	QQR0797-001	INDUCTOR	SPK EMI FILTER	

■ **Electrical parts list (Input board)** **Block No. 01**

⚠	Item	Parts number	Parts name	Remarks	Area
	L7001	QQL231K-100Y	INDUCTOR	US5V	
	L7002	QQL231K-470Y	INDUCTOR	AVDD & VDD	
	L7003	QQL231K-4R7Y	INDUCTOR	AVREF	
	Q2200	KRA101M-T	TRANSISTOR		
	Q2201	2SC3576-JVC-T	TRANSISTOR		
	Q2202	2SC3576-JVC-T	TRANSISTOR		
	Q2209	2SC3576-JVC-T	TRANSISTOR		
	Q2210	2SC3576-JVC-T	TRANSISTOR		
	Q2211	2SC2001/LK/-T	TRANSISTOR		
	Q2217	KRA102M-T	D TRANSISTOR		
	Q2219	2SC3576-JVC-T	TRANSISTOR		
	Q2220	2SC3576-JVC-T	TRANSISTOR		
	Q2222	KRC104M-T	D TRANSISTOR		
	Q2800	KTC3199/GL/-T	TRANSISTOR		
	Q7001	KTA1267/YG/-T	TRANSISTOR	SW5V	
	Q7002	KRC111M-T	TRANSISTOR	RESET SW	
	Q7003	2SC2785/FE/-T	TRANSISTOR	BACKUP CONT	
	Q7031	2SC2785/FE/-T	TRANSISTOR	POUT SW	
	Q7041	2SC2785/FE/-T	TRANSISTOR	PHOTO BUFFER	
	Q7061	KRC111M-T	TRANSISTOR	TUNER SW	
	Q7062	KRC111M-T	TRANSISTOR	TUNER SW	
	Q7091	KRC111M-T	TRANSISTOR	DIMMER	
	Q7092	KTA1267/YG/-T	TRANSISTOR	DIMMER	
	RY901	QSK0109-001	RELAY	SPEAKER RELAY	
	R2000	QRE141J-303Y	C RESISTOR	30K 5% 1/4W	
	R2001	QRE141J-303Y	C RESISTOR	30K 5% 1/4W	
	R2006	QRE141J-222Y	C RESISTOR	2.2K 5% 1/4W	
	R2007	QRE141J-622Y	C RESISTOR	6.2K 5% 1/4W	
	R2008	QRE141J-912Y	C RESISTOR	9.1K 5% 1/4W	
	R2010	QRE141J-752Y	C RESISTOR	7.5K 5% 1/4W	
	R2011	QRE141J-752Y	C RESISTOR	7.5K 5% 1/4W	
	R2012	QRE141J-152Y	C RESISTOR	1.5K 5% 1/4W	
	R2013	QRE141J-222Y	C RESISTOR	2.2K 5% 1/4W	
	R2014	QRE141J-303Y	C RESISTOR	30K 5% 1/4W	
	R2015	QRE141J-473Y	C RESISTOR	47K 5% 1/4W	
	R2016	QRE141J-622Y	C RESISTOR	6.2K 5% 1/4W	
	R2017	QRE141J-182Y	C RESISTOR	1.8K 5% 1/4W	
	R2032	QRJ146J-821X	UNF C RESISTOR	820 5% 1/4W	
	R2038	QRJ146J-821X	UNF C RESISTOR	820 5% 1/4W	
	R2039	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R2040	QRE141J-471Y	C RESISTOR	470 5% 1/4W	
	R2041	QRE141J-182Y	C RESISTOR	1.8K 5% 1/4W	
	R2047	QRE141J-154Y	C RESISTOR	150K 5% 1/4W	
	R2100	QRE141J-303Y	C RESISTOR	30K 5% 1/4W	
	R2101	QRE141J-303Y	C RESISTOR	30K 5% 1/4W	
	R2106	QRE141J-222Y	C RESISTOR	2.2K 5% 1/4W	
	R2107	QRE141J-622Y	C RESISTOR	6.2K 5% 1/4W	
	R2108	QRE141J-912Y	C RESISTOR	9.1K 5% 1/4W	
	R2110	QRE141J-752Y	C RESISTOR	7.5K 5% 1/4W	
	R2111	QRE141J-752Y	C RESISTOR	7.5K 5% 1/4W	
	R2112	QRE141J-152Y	C RESISTOR	1.5K 5% 1/4W	
	R2113	QRE141J-222Y	C RESISTOR	2.2K 5% 1/4W	
	R2114	QRE141J-303Y	C RESISTOR	30K 5% 1/4W	
	R2115	QRE141J-473Y	C RESISTOR	47K 5% 1/4W	
	R2116	QRE141J-622Y	C RESISTOR	6.2K 5% 1/4W	
	R2117	QRE141J-182Y	C RESISTOR	1.8K 5% 1/4W	
	R2132	QRJ146J-821X	UNF C RESISTOR	820 5% 1/4W	
	R2138	QRJ146J-821X	UNF C RESISTOR	820 5% 1/4W	
	R2139	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R2140	QRE141J-471Y	C RESISTOR	470 5% 1/4W	
	R2141	QRE141J-182Y	C RESISTOR	1.8K 5% 1/4W	
	R2147	QRE141J-154Y	C RESISTOR	150K 5% 1/4W	
	R2200	QRE141J-273Y	C RESISTOR	27K 5% 1/4W	

⚠	Item	Parts number	Parts name	Remarks	Area
	R2201	QRE141J-272Y	C RESISTOR	2.7K 5% 1/4W	
	R2202	QRE141J-272Y	C RESISTOR	2.7K 5% 1/4W	
	R2207	QRE141J-513Y	C RESISTOR	51K 5% 1/4W	
	R2208	QRE141J-124Y	C RESISTOR	120K 5% 1/4W	
	R2216	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R2218	QRE141J-471Y	C RESISTOR	470 5% 1/4W	
	R2221	QRE141J-101Y	C RESISTOR	100 5% 1/4W	
	R2222	QRE141J-222Y	C RESISTOR	2.2K 5% 1/4W	
	R2224	QRE141J-222Y	C RESISTOR	2.2K 5% 1/4W	
	R2228	QRE141J-334Y	C RESISTOR	330K 5% 1/4W	
	R2233	QRE141J-473Y	C RESISTOR	47K 5% 1/4W	
	R2500	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R2501	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R2502	QRE141J-1R0Y	C RESISTOR	1.0 5% 1/4W	
	R2503	QRE141J-1R0Y	C RESISTOR	1.0 5% 1/4W	
	R2702	QRE141J-563Y	C RESISTOR	56K 5% 1/4W	
	R2703	QRE141J-302Y	C RESISTOR	3.0K 5% 1/4W	
	R2712	QRE141J-563Y	C RESISTOR	56K 5% 1/4W	
	R2800	QRE141J-152Y	C RESISTOR	1.5K 5% 1/4W	
	R2801	QRE141J-330Y	C RESISTOR	33 5% 1/4W	
⚠	R2802	QRL01DJ-471X	OMF RESISTOR	470 5% 1/1W	
	R2803	QRE141J-100Y	C RESISTOR	10 5% 1/4W	
	R2820	QRE141J-4R7Y	C RESISTOR	4.7 5% 1/4W	
	R2821	QRE141J-4R7Y	C RESISTOR	4.7 5% 1/4W	
	R7002	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R7003	QRE141J-331Y	C RESISTOR	330 5% 1/4W	
	R7004	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R7005	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R7006	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
	R7007	QRE141J-473Y	C RESISTOR	47K 5% 1/4W	
	R7008	QRE141J-333Y	C RESISTOR	33K 5% 1/4W	
	R7041	QRE141J-823Y	C RESISTOR	82K 5% 1/4W	
	R7042	QRE141J-394Y	C RESISTOR	390K 5% 1/4W	
	R7043	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
	R7062	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R7064	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R7075	QRE141J-222Y	C RESISTOR	2.2K 5% 1/4W	
	R7076	QRE141J-473Y	C RESISTOR	47K 5% 1/4W	
	R7077	QRE141J-913Y	C RESISTOR	91K 5% 1/4W	
	R7078	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R7079	QRE141J-223Y	C RESISTOR	22K 5% 1/4W	
	R7091	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R7092	QRE141J-473Y	C RESISTOR	47K 5% 1/4W	
	R7093	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R7101	QRE141J-682Y	C RESISTOR	6.8K 5% 1/4W	
	R7102	QRE141J-223Y	C RESISTOR	22K 5% 1/4W	
	R7103	QRE141J-333Y	C RESISTOR	33K 5% 1/4W	
	R7104	QRE141J-223Y	C RESISTOR	22K 5% 1/4W	
	R7105	QRE141J-222Y	C RESISTOR	2.2K 5% 1/4W	
	R7106	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
	R7107	QRE141J-222Y	C RESISTOR	2.2K 5% 1/4W	
	R7108	QRE141J-563Y	C RESISTOR	56K 5% 1/4W	
	R7109	QRE141J-222Y	C RESISTOR	2.2K 5% 1/4W	
	R7110	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R7111	QRE141J-222Y	C RESISTOR	2.2K 5% 1/4W	
	R7112	QRE141J-222Y	C RESISTOR	2.2K 5% 1/4W	
	R7113	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R7114	QRE141J-222Y	C RESISTOR	2.2K 5% 1/4W	
	R7115	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R7116	QRE141J-222Y	C RESISTOR	2.2K 5% 1/4W	
	R7117	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R7118	QRE141J-222Y	C RESISTOR	2.2K 5% 1/4W	
	R7119	QRE141J-823Y	C RESISTOR	82K 5% 1/4W	

■ **Electrical parts list (Input board)** **Block No. 01**

⚠	Item	Parts number	Parts name	Remarks	Area
	R7120	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R7121	QRE141J-473Y	C RESISTOR	47K 5% 1/4W	
	R7122	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R7123	QRE141J-473Y	C RESISTOR	47K 5% 1/4W	
	R7124	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R7125	QRE141J-473Y	C RESISTOR	47K 5% 1/4W	
	R7126	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R7127	QRE141J-222Y	C RESISTOR	2.2K 5% 1/4W	
	R7128	QRE141J-222Y	C RESISTOR	2.2K 5% 1/4W	
	R7129	QRE141J-222Y	C RESISTOR	2.2K 5% 1/4W	
	R7130	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R7131	QRE141J-222Y	C RESISTOR	2.2K 5% 1/4W	
	R7132	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R7133	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R7134	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R7135	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R7136	QRE141J-222Y	C RESISTOR	2.2K 5% 1/4W	
	R7137	QRE141J-222Y	C RESISTOR	2.2K 5% 1/4W	
	R7138	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R7139	QRE141J-222Y	C RESISTOR	2.2K 5% 1/4W	
	R7140	QRE141J-222Y	C RESISTOR	2.2K 5% 1/4W	
	R7141	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R7142	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R7143	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R7144	QRE141J-222Y	C RESISTOR	2.2K 5% 1/4W	
	R7145	QRE141J-222Y	C RESISTOR	2.2K 5% 1/4W	
	R7146	QRE141J-222Y	C RESISTOR	2.2K 5% 1/4W	
	R7147	QRE141J-823Y	C RESISTOR	82K 5% 1/4W	
	R7148	QRE141J-222Y	C RESISTOR	2.2K 5% 1/4W	
	R7149	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R7150	QRE141J-222Y	C RESISTOR	2.2K 5% 1/4W	
	R7151	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R7152	QRE141J-222Y	C RESISTOR	2.2K 5% 1/4W	
	R7153	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R7154	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R7155	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R7156	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R7157	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R7158	QRE141J-123Y	C RESISTOR	12K 5% 1/4W	
	R7159	QRE141J-222Y	C RESISTOR	2.2K 5% 1/4W	
	R7160	QRE141J-222Y	C RESISTOR	2.2K 5% 1/4W	
	R7162	QRE141J-222Y	C RESISTOR	2.2K 5% 1/4W	
	R7163	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R7164	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
	R7165	QRE141J-222Y	C RESISTOR	2.2K 5% 1/4W	
	R7166	QRE141J-105Y	C RESISTOR	1.0M 5% 1/4W	
	R7167	QRE141J-472Y	C RESISTOR	4.7K 5% 1/4W	
	R7800	QRE141J-103Y	C RESISTOR	UX-L30	
	R7801	QRE141J-103Y	C RESISTOR	UX-L40	
	X7001	QAX0320-001Z	CRYSTAL	MAIN CLOCK	

■ **Electrical parts list (Main board)** **Block No. 02**

⚠	Item	Parts number	Parts name	Remarks	Area
	CN731	QGF1201F3-23	CONNECTOR		
	CN732	QGF1201F3-23	CONNECTOR		
	CN905	QGA2501F1-03	CONNECTOR		
	CN944	QGB2510K2-11	CONNECTOR		
	CN945	QGB2510K2-10	CONNECTOR		
	CN951	QGD2504C1-03Z	SOCKET		
	C1000	QFLM1HJ-104Z	M CAPACITOR	.10MF 5% 50V	
	C1001	QFLM1HJ-104Z	M CAPACITOR	.10MF 5% 50V	
	C1002	QFLM1HJ-104Z	M CAPACITOR	.10MF 5% 50V	
	C1003	QFLM1HJ-104Z	M CAPACITOR	.10MF 5% 50V	
	C1004	QFLM1HJ-104Z	M CAPACITOR	.10MF 5% 50V	
	C1005	QFLM1HJ-104Z	M CAPACITOR	.10MF 5% 50V	
	C1006	QFLM1HJ-104Z	M CAPACITOR	.10MF 5% 50V	
	C1007	QFLM1HJ-104Z	M CAPACITOR	.10MF 5% 50V	
	C1012	EETC1HM-106ZJC	E CAPACITOR		
	C4000	QCBB1HK-101Y	C CAPACITOR	100PF 10% 50V	
	C4001	QCBB1HK-101Y	C CAPACITOR	100PF 10% 50V	
	C4002	QETC1HM-106Z	E CAPACITOR	10MF 20% 50V	
	C4004	QETC1HM-226Z	E CAPACITOR	22MF 20% 50V	
	C4005	QETC1HM-226Z	E CAPACITOR	22MF 20% 50V	
	C4006	QCBB1HK-101Y	C CAPACITOR	100PF 10% 50V	
	C4007	QCBB1HK-101Y	C CAPACITOR	100PF 10% 50V	
	C4008	QETC1HM-476Z	E CAPACITOR	47MF 20% 50V	
	C4009	QETC1HM-476Z	E CAPACITOR	47MF 20% 50V	
	C4010	QCSB1HJ-100Y	C CAPACITOR	10PF 5% 50V	
	C4011	QCSB1HJ-100Y	C CAPACITOR	10PF 5% 50V	
	C4012	QFLM1HJ-223Z	M CAPACITOR	.022MF 5% 50V	
	C4013	QETC1HM-106Z	E CAPACITOR	10MF 20% 50V	
	C4014	QFLM1HJ-104Z	M CAPACITOR	.10MF 5% 50V	
	C4015	QFLM1HJ-104Z	M CAPACITOR	.10MF 5% 50V	
	C4016	QFLM1HJ-104Z	M CAPACITOR	.10MF 5% 50V	
	C4017	QFLM1HJ-104Z	M CAPACITOR	.10MF 5% 50V	
	C4018	QETC1HM-106Z	E CAPACITOR	10MF 20% 50V	
	C4019	QETC1HM-106Z	E CAPACITOR	10MF 20% 50V	
	C4020	QETM1HM-228	E CAPACITOR	UX-L30	
	C4020	QEZ0570-228	E CAPACITOR	UX-L40	
	C4021	QEZ0570-228	E CAPACITOR	UX-L40	
	C4021	QETM1HM-228	E CAPACITOR	UX-L30	
	C4028	QETC1EM-226Z	E CAPACITOR	22MF 20% 25V	
	C4029	QETC1CM-476Z	E CAPACITOR	47MF 20% 16V	
	C4030	QETC1HM-226Z	E CAPACITOR	22MF 20% 50V	
	C4031	QCF31HZ-223Z	C CAPACITOR	.022MF +80:-20%	
	C4036	QETC1HM-106Z	E CAPACITOR	10MF 20% 50V	
	C4037	QETC1HM-106Z	E CAPACITOR	10MF 20% 50V	
	C4038	QETC1HM-106Z	E CAPACITOR	10MF 20% 50V	
	C4039	QETC1HM-224Z	E CAPACITOR	UX-L40	
	C4040	QETC1HM-105Z	E CAPACITOR	UX-L40	
	C4201	QETN1CM-107Z	E CAPACITOR	100MF 20% 16V	
	C4202	QFLM1HJ-104Z	M CAPACITOR	.10MF 5% 50V	
	C4203	QETN1CM-107Z	E CAPACITOR	100MF 20% 16V	
	C4204	QFLM1HJ-104Z	M CAPACITOR	.10MF 5% 50V	
	C4205	QETN1CM-107Z	E CAPACITOR	100MF 20% 16V	
	C4206	QFLM1HJ-104Z	M CAPACITOR	.10MF 5% 50V	
	C4222	QFVJ1HJ-334Z	MF CAPACITOR	.33MF 5% 50V	
	C4223	QFVJ1HJ-334Z	MF CAPACITOR	.33MF 5% 50V	
	C5010	QDYB1CM-103Y	C CAPACITOR		
	C5011	QDYB1CM-103Y	C CAPACITOR		
	C7303	QDYB1CM-103Y	C CAPACITOR		
	C7304	QDYB1CM-103Y	C CAPACITOR		
	C7351	QDYB1CM-103Y	C CAPACITOR		
	C7352	QDYB1CM-103Y	C CAPACITOR		
	C7501	QEKC1CM-476Z	E CAPACITOR	47MF 20% 16V	
	C7503	QDGB1HK-102Y	C CAPACITOR		
	C7506	QDYB1CM-103Y	C CAPACITOR		
	C7507	QDYB1CM-103Y	C CAPACITOR		
	DI730	QLD0214-001	LCD MODULE	LCD DISPLAY	
⚠	D1000	1N4003S-T5	SI DIODE		
⚠	D1001	1N4003S-T5	SI DIODE		
⚠	D1002	1N4003S-T5	SI DIODE		
⚠	D1003	1N4003S-T5	SI DIODE		
⚠	D1004	1N5401-TM	DIODE		
⚠	D1005	1N5401-TM	DIODE		
⚠	D1006	1N5401-TM	DIODE		
⚠	D1007	1N5401-TM	DIODE		
	D1012	1SS119-041-T2	SI DIODE		
	D1013	DZ5.1BSB-T2	Z DIODE		
	D4000	1SS119-041-T2	SI DIODE		
	D4001	1SS119-041-T2	SI DIODE		
	D4002	1SS119-041-T2	SI DIODE		
	D4003	1SS119-041-T2	SI DIODE		
⚠	D4005	DZ2.4BSB-T2	Z DIODE	UX-L40	
⚠	D4006	DZ11BSB-T2	Z DIODE	UX-L40	
⚠	D4009	DZ5.1BSB-T2	Z DIODE		
	D4218	1SS119-041-T2	SI DIODE		
⚠	D4219	DZ8.2BSC-T2	Z DIODE		
⚠	D4220	DZ11BSB-T2	Z DIODE		
⚠	D4221	DZ11BSB-T2	Z DIODE		
	D7322	QLMP-AD49	LED	BACKLIGHT	
	D7323	QLMP-AD49	LED	BACKLIGHT	
	D7325	QLMP-AD49	LED	BACKLIGHT	
	D7362	DZ10BSC-T2	Z DIODE		
	D7363	DZ10BSC-T2	Z DIODE		
	D7365	DZ10BSC-T2	Z DIODE		
	D7501	1SS119-041-T2	SI DIODE		
	D7502	SLR-342MC-T	LED	GREEN LED	
	D7503	SLR-342VC-T	LED	RED LED	
	EP940	E409182-001SM	GRAND TERMINAL		
	FW500	QUM154-15DGZ4	PARA RIBON WIRE		
	FW750	QUM026-11DGZ4	FLAT WIRE		
	FW945	QUM153-16DGZ4	FLAT WIRE	POWER TO TRANS	
	FW950	QUM153-16DGZ4	FLAT WIRE		
⚠	F1000	QMF51W2-2R5-J8	FUSE		US,UJ,UW
⚠	F1000	QMF51W2-1R25-J8	FUSE		UP
⚠	F1001	QMF51W2-1R25-J8	FUSE		
⚠	F1002	QMF51W2-1R25-J8	FUSE		US,UJ,UW
	IC750	GP1UM261XK	IR DETECT UNIT		
⚠	IC940	TDA7294	IC		
⚠	IC941	TDA7294	IC		
⚠	IC942	L4909	REGULATOR IC		
	J 902	GP1FA550TZ	OPT TRANSMITTER	OPTICAL JACK	
	JS731	QSW0975-001	ROTARY ENCODER	VOLUME	
⚠	J1000	QGA7901C1-02	CONNECTOR		
	J5000	QNS0170-001	JACK		
	K5022	QQR0621-001Z	FERRITE BEADS		
	L4000	QQLZ035-R39	INDUCTOR		
	L4001	QQLZ035-R39	INDUCTOR		
	L5030	QQL231K-470Y	INDUCTOR		
	L5033	QQL231K-470Y	INDUCTOR		
	Q1002	KTC3199/GL/-T	TRANSISTOR		
	Q4000	2SC3576-JVC-T	TRANSISTOR		
	Q4001	2SC3576-JVC-T	TRANSISTOR		
	Q4002	KRA102M-T	D TRANSISTOR		
	Q4003	KTC3199/GL/-T	TRANSISTOR		
	Q4004	KTA1267/YG/-T	TRANSISTOR		
	Q4005	KTC3199/GL/-T	TRANSISTOR		
	Q4006	2SK301/PQ/-T	FET	UX-L40	

■ **Electrical parts list (Main board)** **Block No. 02**

⚠	Item	Parts number	Parts name	Remarks	Area
	Q7500	KRC111M-T	TRANSISTOR		
	R1003	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R1004	QRE141J-472Y	C RESISTOR	4.7K 5% 1/4W	
	R1005	QRE141J-472Y	C RESISTOR	4.7K 5% 1/4W	
	R4000	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R4001	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R4002	QRE141J-472Y	C RESISTOR	4.7K 5% 1/4W	
	R4003	QRE141J-472Y	C RESISTOR	4.7K 5% 1/4W	
	R4004	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R4005	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R4006	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
	R4007	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
⚠	R4008	QRJ146J-821X	UNF C RESISTOR	820 5% 1/4W	
⚠	R4009	QRJ146J-821X	UNF C RESISTOR	820 5% 1/4W	
	R4010	QRE141J-393Y	C RESISTOR	39K 5% 1/4W	
	R4011	QRE141J-393Y	C RESISTOR	39K 5% 1/4W	
	R4012	QRE141J-122Y	C RESISTOR	1.2K 5% 1/4W	
	R4013	QRE141J-122Y	C RESISTOR	1.2K 5% 1/4W	
⚠	R4014	QRJ146J-100X	UNF C RESISTOR	10 5% 1/4W	
⚠	R4015	QRJ146J-100X	UNF C RESISTOR	10 5% 1/4W	
⚠	R4016	QRJ146J-100X	UNF C RESISTOR	10 5% 1/4W	
⚠	R4017	QRJ146J-100X	UNF C RESISTOR	10 5% 1/4W	
⚠	R4018	QRT01DJ-R22X	MF RESISTOR	5% 1/1W	
⚠	R4019	QRT01DJ-R22X	MF RESISTOR	5% 1/1W	
	R4022	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R4023	QRE141J-472Y	C RESISTOR	4.7K 5% 1/4W	
	R4026	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R4027	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R4028	QRE141J-301Y	C RESISTOR	300 5% 1/4W	
	R4029	QRE141J-823Y	C RESISTOR	82K 5% 1/4W	
	R4030	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
	R4031	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R4032	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
	R4033	QRE141J-124Y	C RESISTOR	120K 5% 1/4W	
	R4034	QRE141J-122Y	C RESISTOR	1.2K 5% 1/4W	
	R4035	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R4036	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
⚠	R4037	QRZ9006-4R7X	F RESISTOR	4.7 1W	
	R4038	QRE141J-105Y	C RESISTOR	UX-L40	
	R4039	QRE141J-105Y	C RESISTOR	UX-L40	
	R4040	QRE141J-473Y	C RESISTOR	UX-L40	
	R4041	QRE141J-153Y	C RESISTOR	UX-L40	
	R4042	QRE141J-512Y	C RESISTOR	UX-L40	
	R4043	QRE141J-103Y	C RESISTOR	UX-L40	
	R4044	QRE141J-821Y	C RESISTOR	UX-L40	
	R4045	QRE141J-203Y	C RESISTOR	20K 5% 1/4W	
	R4200	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R4201	QRE141J-822Y	C RESISTOR	8.2K 5% 1/4W	
	R4202	QRE141J-122Y	C RESISTOR	1.2K 5% 1/4W	
	R4203	QRE141J-472Y	C RESISTOR	4.7K 5% 1/4W	
	R4204	QRE141J-122Y	C RESISTOR	1.2K 5% 1/4W	
	R4205	QRE141J-622Y	C RESISTOR	6.2K 5% 1/4W	
	R4206	QRE141J-122Y	C RESISTOR	1.2K 5% 1/4W	
	R4207	QRE141J-820Y	C RESISTOR	82 5% 1/4W	
	R4209	QRE141J-820Y	C RESISTOR	82 5% 1/4W	
	R7310	QRE141J-301Y	C RESISTOR	300 5% 1/4W	
	R7311	QRE141J-301Y	C RESISTOR	300 5% 1/4W	
	R7313	QRE141J-301Y	C RESISTOR	300 5% 1/4W	
	R7320	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R7321	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R7322	QRE141J-122Y	C RESISTOR	1.2K 5% 1/4W	
	R7323	QRE141J-182Y	C RESISTOR	1.8K 5% 1/4W	
	R7324	QRE141J-222Y	C RESISTOR	2.2K 5% 1/4W	

⚠	Item	Parts number	Parts name	Remarks	Area
	R7325	QRE141J-272Y	C RESISTOR	2.7K 5% 1/4W	
	R7326	QRE141J-392Y	C RESISTOR	3.9K 5% 1/4W	
	R7327	QRE141J-562Y	C RESISTOR	5.6K 5% 1/4W	
	R7328	QRE141J-273Y	C RESISTOR	27K 5% 1/4W	
	R7501	QRE141J-161Y	C RESISTOR	160 5% 1/4W	
	R7502	QRE141J-470Y	C RESISTOR	47 5% 1/4W	
	R7503	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R7504	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R7505	QRE141J-122Y	C RESISTOR	1.2K 5% 1/4W	
	R7506	QRE141J-182Y	C RESISTOR	1.8K 5% 1/4W	
	R7507	QRE141J-222Y	C RESISTOR	2.2K 5% 1/4W	
	R7508	QRE141J-272Y	C RESISTOR	2.7K 5% 1/4W	
	R7509	QRE141J-392Y	C RESISTOR	3.9K 5% 1/4W	
	S1000	QSW0812-001	VOLTAGE SWITCH		US,UJ,UW
	S7302	QSW0825-001Z	TACT SWITCH	CD	
	S7303	QSW0825-001Z	TACT SWITCH	TAPE	
	S7304	QSW0825-001Z	TACT SWITCH	FM/AM	
	S7305	QSW0825-001Z	TACT SWITCH	TREBLE	
	S7306	QSW0825-001Z	TACT SWITCH	FF	
	S7307	QSW0825-001Z	TACT SWITCH	STOP	
	S7308	QSW0825-001Z	TACT SWITCH	REV	
	S7309	QSW0825-001Z	TACT SWITCH	BASS	
	S7500	QSW0825-001Z	TACT SWITCH	POWER	
	S7501	QSW0825-001Z	TACT SWITCH	REC	
	S7502	QSW0825-001Z	TACT SWITCH	REV.MODE	
	S7503	QSW0825-001Z	TACT SWITCH	AHB PRO	
	S7504	QSW0825-001Z	TACT SWITCH	CLOCK/TIMER	
	S7505	QSW0825-001Z	TACT SWITCH	AUX	
	S7506	QSW0825-001Z	TACT SWITCH	OPEN/CLOSE	
	Z1000	QNG0003-001Z	FUSE CLIP		
	Z1001	QNG0003-001Z	FUSE CLIP		
	Z1002	QNG0003-001Z	FUSE CLIP		
	Z1003	QNG0003-001Z	FUSE CLIP		
	Z1004	QNG0003-001Z	FUSE CLIP		US,UJ,UW
	Z1005	QNG0003-001Z	FUSE CLIP		US,UJ,UW

■ **Electrical parts list (CD board)** **Block No. 03**

⚠	Item	Parts number	Parts name	Remarks	Area
	C 601	NCB31CK-104X	C CAPACITOR		
	C 602	NCB31HK-222X	C CAPACITOR		
	C 603	NCB31HK-223X	C CAPACITOR		
	C 604	NCB31HK-223X	C CAPACITOR		
	C 605	NCS31HJ-391X	C CAPACITOR		
	C 606	NCS31HJ-820X	C CAPACITOR		
	C 610	NCB31CK-273X	C CAPACITOR		
	C 612	QERF1HM-105Z	E CAPACITOR	1.0MF 20% 50V	
	C 613	NCB31AK-224X	C CAPACITOR		
	C 614	NCB31CK-273X	C CAPACITOR		
	C 615	NCB31HK-472X	C CAPACITOR		
	C 616	NCB31HK-103X	C CAPACITOR		
	C 617	NCS31HJ-331X	C CAPACITOR		
	C 619	NCS31HJ-330X	C CAPACITOR		
	C 621	NCF31AZ-105X	C CAPACITOR		
	C 622	NCB31CK-473X	C CAPACITOR		
	C 623	NCF31AZ-105X	C CAPACITOR		
	C 624	QERF0JM-107Z	E CAPACITOR	100MF 20% 6.3V	
	C 631	QERF1CM-106Z	E CAPACITOR	10MF 20% 16V	
	C 632	NCF31AZ-105X	C CAPACITOR		
	C 633	NCB31HK-223X	C CAPACITOR		
	C 641	NCB31CK-473X	C CAPACITOR		
	C 642	NCB31HK-472X	C CAPACITOR		
	C 643	NCS31HJ-821X	C CAPACITOR		
	C 651	NCS31HJ-120X	C CAPACITOR		
	C 652	NCS31HJ-120X	C CAPACITOR		
	C 653	NCB31CK-104X	C CAPACITOR		
	C 654	NCS31HJ-151X	C CAPACITOR		
	C 655	NCB31CK-104X	C CAPACITOR		
	C 656	NCB31CK-104X	C CAPACITOR		
	C 657	QERF1AM-227Z	E CAPACITOR	220MF 20% 10V	
	C 658	NCB31CK-104X	C CAPACITOR		
	C 661	NCS31HJ-471X	C CAPACITOR		
	C 663	NCB31HK-223X	C CAPACITOR		
	C 664	NCB31HK-223X	C CAPACITOR		
	C 665	NCB31AK-154X	C CAPACITOR		
	C 669	QERF1AM-227Z	E CAPACITOR	220MF 20% 10V	
	C 670	NCS31HJ-151X	C CAPACITOR		
	C 671	NCS31HJ-151X	C CAPACITOR		
	C 672	NCS31HJ-151X	C CAPACITOR		
	C 673	QERF1AM-227Z	E CAPACITOR	220MF 20% 10V	
	C 676	NCB31CK-104X	C CAPACITOR		
	C 677	NCB31CK-104X	C CAPACITOR		
	C 679	QERF0JM-107Z	E CAPACITOR	100MF 20% 6.3V	
	C 680	NCB31CK-104X	C CAPACITOR		
	C 681	NCB31AK-334X	C CAPACITOR		
	C 693	NCB31HK-222X	C CAPACITOR		
	C 694	NCB31HK-222X	C CAPACITOR		
	C 801	NCB31HK-682X	C CAPACITOR		
	C 802	NCB31HK-472X	C CAPACITOR		
	C 811	NCS31HJ-391X	C CAPACITOR		
	C 812	NCS31HJ-391X	C CAPACITOR		
	C 813	NCS31HJ-391X	C CAPACITOR		
	C 814	NCS31HJ-391X	C CAPACITOR		
	C 821	NCF31AZ-105X	C CAPACITOR		
	C 822	QERF1AM-227Z	E CAPACITOR	220MF 20% 10V	
	C 823	QERF1AM-227Z	E CAPACITOR	220MF 20% 10V	
	C 824	NCB31HK-222X	C CAPACITOR		
	C 831	QEKJ1CM-107Z	E CAPACITOR	100MF 20% 16V	
	C 832	NCB31HK-103X	C CAPACITOR		
	C 833	NCB31CK-104X	C CAPACITOR		
	CN601	QGF1016F1-16	CONNECTOR		
	CN606	QGF1205F1-05	CONNECTOR		

⚠	Item	Parts number	Parts name	Remarks	Area
	CN651	QGF1205F1-16	CONNECTOR		
	CN652	QGF1205F1-13	CONNECTOR		
	CN801	QGA2001C1-06	6P PLUG ASSY		
	D 601	MA111-X	DIODE		
	D 602	MA111-X	DIODE		
	D 831	DZ5.6BSB-T2	Z DIODE		
	IC601	AN22000A-W	IC		
	IC651	MN662748RPMFA	IC		
	IC801	LA6541-X	IC		
	IC802	LB1641	IC		
	L 831	QQL244K-100Z	INDUCTOR		
	Q 631	2SB709A/QR/-X	TRANSISTOR		
	Q 801	KTA1271/OY/-T	TRANSISTOR		
	R 601	NRSA63J-274X	MG RESISTOR		
	R 602	NRSA63J-684X	MG RESISTOR		
	R 603	NRSA63J-433X	MG RESISTOR		
	R 604	NRSA63J-184X	MG RESISTOR		
	R 605	NRSA63J-472X	MG RESISTOR		
	R 606	NRSA63J-472X	MG RESISTOR		
	R 607	NRSA63J-623X	MG RESISTOR		
	R 610	NRSA63J-223X	MG RESISTOR		
	R 611	NRSA63J-223X	MG RESISTOR		
	R 612	NRSA63J-822X	MG RESISTOR		
	R 613	NRSA63J-472X	MG RESISTOR		
	R 615	NRSA63J-472X	MG RESISTOR		
	R 616	NRSA63J-472X	MG RESISTOR		
	R 617	NRSA63J-472X	MG RESISTOR		
	R 631	NRSA63J-2R2X	MG RESISTOR		
	R 632	NRSA63J-100X	MG RESISTOR		
	R 634	NRSA63J-120X	MG RESISTOR		
	R 635	NRSA63J-121X	MG RESISTOR		
	R 636	NRSA63J-910X	MG RESISTOR		
	R 641	NRSA63J-154X	MG RESISTOR		
	R 642	NRSA63J-564X	MG RESISTOR		
	R 643	NRSA63J-153X	MG RESISTOR		
	R 647	NRSA63J-0R0X	MG RESISTOR		
	R 651	NRSA63J-102X	MG RESISTOR		
	R 652	NRSA63J-102X	MG RESISTOR		
	R 653	NRSA63J-102X	MG RESISTOR		
	R 654	NRSA63J-101X	MG RESISTOR		
	R 655	NRSA63J-102X	MG RESISTOR		
	R 656	NRSA63J-102X	MG RESISTOR		
	R 657	NRSA63J-0R0X	MG RESISTOR		
	R 658	NRSA63J-0R0X	MG RESISTOR		
	R 659	NRSA63J-0R0X	MG RESISTOR		
	R 661	NRSA63J-393X	MG RESISTOR		
	R 662	NRSA63J-683X	MG RESISTOR		
	R 663	NRSA63J-124X	MG RESISTOR		
	R 664	NRSA63J-331X	MG RESISTOR		
	R 665	NRSA63J-271X	MG RESISTOR		
	R 666	NRSA63J-221X	MG RESISTOR		
	R 667	NRSA63J-4R7X	MG RESISTOR		
	R 670	NRSA63J-101X	MG RESISTOR		
	R 681	NRSA63J-272X	MG RESISTOR		
	R 682	NRSA63J-102X	MG RESISTOR		
	R 683	NRSA63J-105X	MG RESISTOR		
	R 684	NRSA63J-155X	MG RESISTOR		
	R 691	NRSA63J-102X	MG RESISTOR		
	R 692	NRSA63J-102X	MG RESISTOR		
	R 801	NRSA63J-272X	MG RESISTOR		
	R 802	NRSA63J-472X	MG RESISTOR		
	R 803	NRSA63J-472X	MG RESISTOR		
	R 804	NRSA63J-823X	MG RESISTOR		

■ **Electrical parts list (CD board)** **Block No. 03**

⚠	Item	Parts number	Parts name	Remarks	Area
	R 805	NRSA63J-912X	MG RESISTOR		
	R 806	NRSA63J-513X	MG RESISTOR		
	R 807	NRSA63J-392X	MG RESISTOR		
	R 808	NRSA63J-563X	MG RESISTOR		
	R 821	NRSA63J-0R0X	MG RESISTOR		
	R 822	NRSA63J-473X	MG RESISTOR		
	R 831	QRE141J-100Y	C RESISTOR	10 5% 1/4W	
	W 605	QJP001-031200	3P PLUG ASSY		
	X 651	QAX0413-001Z	CRYSTAL		

■ **Electrical parts list (Tuner board)** **Block No. 04**

⚠	Item	Parts number	Parts name	Remarks	Area
	C 1	NCB21HK-223X	C CAPACITOR		
	C 2	NCB21HK-103X	C CAPACITOR		
	C 3	EETC1CM-106ZJC	E CAPACITOR		
	C 4	NCB21HK-103X	C CAPACITOR		
	C 6	NCB21HK-102X	C CAPACITOR		
	C 7	NCB21HK-102X	C CAPACITOR		
	C 8	NCB21HK-102X	C CAPACITOR		
	C 10	NRSA02J-0R0X	MG RESISTOR		
	C 11	NCB21HK-104X	C CAPACITOR		
	C 12	NCB21HK-473X	C CAPACITOR		
	C 13	NCS21HJ-120X	C CAPACITOR		
	C 14	QEKC1AM-107Z	E CAPACITOR	100MF 20% 10V	
	C 15	NCS21HJ-120X	C CAPACITOR		
	C 16	NCS21HJ-120X	C CAPACITOR		
	C 17	NCB21HK-392X	C CAPACITOR		
	C 18	QEQ61HM-474Z	NP E CAPACITOR	.47MF 20% 50V	
	C 19	NCB21HK-473X	C CAPACITOR		
	C 20	NCB21HK-102X	C CAPACITOR		
	C 21	NCB21HK-223X	C CAPACITOR		
	C 22	NCS21HJ-151X	C CAPACITOR		
	C 23	NCS21HJ-151X	C CAPACITOR		
	C 24	NCS21HJ-151X	C CAPACITOR		
	C 25	QEKC1AM-107Z	E CAPACITOR	100MF 20% 10V	
	C 26	NCB21HK-102X	C CAPACITOR		
	C 27	NCB21HK-102X	C CAPACITOR		
	C 30	EEKC1CM-107ZJC	E CAPACITOR		
	C 31	EEKC1CM-226ZJC	E CAPACITOR		
	C 32	NCB21HK-473X	C CAPACITOR		
	C 33	NCB21HK-473X	C CAPACITOR		
	C 34	NCB21HK-223X	C CAPACITOR		
	C 35	NCB21HK-473X	C CAPACITOR		
	C 36	EEKC1HM-105ZJC	E CAPACITOR		
	C 37	EEKC1HM-105ZJC	E CAPACITOR		
	C 38	EETC1HM-224ZJC	E CAPACITOR		
	C 39	EETC1HM-105ZJC	E CAPACITOR		
	C 40	QETN1CM-106Z	E CAPACITOR	10MF 20% 16V	
	C 41	QETN1CM-106Z	E CAPACITOR	10MF 20% 16V	
	C 42	NCB21HK-152X	C CAPACITOR		
	C 43	NCB21HK-152X	C CAPACITOR		
	C 44	QETN1CM-106Z	E CAPACITOR	10MF 20% 16V	
	C 45	QETN1CM-106Z	E CAPACITOR	10MF 20% 16V	
	C 46	NCB21HK-273X	C CAPACITOR		
	C 47	EETC1HM-105ZJC	E CAPACITOR		
	C 48	NCB21HK-222X	C CAPACITOR		
	C 49	NCS21HJ-471X	C CAPACITOR		
	C 50	EEKC1CM-226ZJC	E CAPACITOR		
	C 51	EEKC1HM-105ZJC	E CAPACITOR		
	C 52	QFVJ1HJ-274Z	MF CAPACITOR	.27MF 5% 50V	
	C 53	EETC1CM-226ZJC	E CAPACITOR		
	C 54	NCB21HK-473X	C CAPACITOR		
	C 57	NCB21HK-102X	C CAPACITOR		
	C 58	NCB21HK-473X	C CAPACITOR		
	C 59	NCB21HK-102X	C CAPACITOR		
	CF 1	QAX0677-001Z	C FILTER		
	CF 2	QAX0677-001Z	C FILTER		
	CF 3	QAX0610-001Z	C DISCRIMINATOR		
	CN 1	QGF1205F1-09	CONNECTOR		
	D 1	1SS133-T2	SI DIODE		
	D 2	1SS133-T2	SI DIODE		
	D 3	1SS133-T2	SI DIODE		
	D 4	1SS133-T2	SI DIODE		
	D 11	1SS133-T2	SI DIODE		
	IC 1	LA1838	IC		

⚠	Item	Parts number	Parts name	Remarks	Area
	IC 2	LC72136N	IC		
	J 1	QNB0014-001	ANT TERMINAL		
	L 1	QQR0796-002	COIL BLOCK		
	Q 1	2SC2814/4-5/-X	TRANSISTOR		
	Q 5	KRA107S-X	TRANSISTOR		
	R 1	QRE141J-560Y	C RESISTOR	56 5% 1/4W	
	R 2	NRSA02J-331X	MG RESISTOR		
	R 3	NRSA02J-224X	MG RESISTOR		
	R 4	NRSA02J-331X	MG RESISTOR		
	R 5	NRSA02J-560X	MG RESISTOR		
	R 6	NRSA02J-240X	MG RESISTOR		
	R 10	NRSA02J-222X	MG RESISTOR		
	R 13	NRSA02J-103X	MG RESISTOR		
	R 14	NRSA02J-104X	MG RESISTOR		
	R 15	NRSA02J-332X	MG RESISTOR		
	R 16	NRSA02J-472X	MG RESISTOR		
⚠	R 17	QRZ9005-680X	F RESISTOR	68 1W	
	R 18	NRSA02J-102X	MG RESISTOR		
	R 19	NRSA02J-102X	MG RESISTOR		
	R 20	NRSA02J-102X	MG RESISTOR		
	R 21	NRSA02J-562X	MG RESISTOR		
	R 22	NRSA02J-472X	MG RESISTOR		
	R 23	NRSA02J-182X	MG RESISTOR		
	R 24	NRSA02J-103X	MG RESISTOR		
	R 25	NRSA02J-331X	MG RESISTOR		
	R 26	NRSA02J-222X	MG RESISTOR		
	R 27	NRSA02J-103X	MG RESISTOR		
	R 28	NRSA02J-103X	MG RESISTOR		
	R 29	NRSA02J-103X	MG RESISTOR		
	R 30	NRSA02J-122X	MG RESISTOR		
	R 31	NRSA02J-102X	MG RESISTOR		
	R 32	NRSA02J-102X	MG RESISTOR		
	R 33	NRSA02J-331X	MG RESISTOR		
	R 34	NRSA02J-470X	MG RESISTOR		
	R 35	NRSA02J-562X	MG RESISTOR		
	R 36	NRSA02J-332X	MG RESISTOR		
	R 37	NRSA02J-103X	MG RESISTOR		
	R 38	NRSA02J-563X	MG RESISTOR		
	R 39	NRSA02J-563X	MG RESISTOR		
	R 40	NRSA02J-243X	MG RESISTOR		
	R 41	NRSA02J-332X	MG RESISTOR		
	R 60	NRSA02J-0R0X	MG RESISTOR		
	T 1	QQR0793-001	IFT		
	TU 1	QAU0161-001	FRONT END		
	X 1	QAX0402-001	CRYSTAL		

■ **Electrical parts list (Head amplifier board)** **Block No. 05**

⚠	Item	Parts number	Parts name	Remarks	Area
	C 101	NCS21HJ-821X	C CAPACITOR		
	C 102	NCS21HJ-221X	C CAPACITOR		
	C 103	QEKJ0JM-227Z	E CAPACITOR	220MF 20% 6.3V	
	C 104	NCB21HK-333X	C CAPACITOR		
	C 105	NCB21HK-222X	C CAPACITOR		
	C 106	QEKJ1CM-106Z	E CAPACITOR	10MF 20% 16V	
	C 107	NCS21HJ-561X	C CAPACITOR		
	C 108	QEKJ1EM-475Z	E CAPACITOR	4.7MF 20% 25V	
	C 109	QEKJ1EM-475Z	E CAPACITOR	4.7MF 20% 25V	
	C 110	NCB21HK-682X	C CAPACITOR		
	C 111	NCB21HK-152X	C CAPACITOR		
	C 113	NCB21HK-393X	C CAPACITOR		
	C 121	NCS21HJ-331X	C CAPACITOR		
	C 201	NCS21HJ-821X	C CAPACITOR		
	C 202	NCS21HJ-221X	C CAPACITOR		
	C 203	QEKJ0JM-227Z	E CAPACITOR	220MF 20% 6.3V	
	C 204	NCB21HK-333X	C CAPACITOR		
	C 205	NCB21HK-222X	C CAPACITOR		
	C 206	QEKJ1CM-106Z	E CAPACITOR	10MF 20% 16V	
	C 207	NCS21HJ-561X	C CAPACITOR		
	C 208	QEKJ1EM-475Z	E CAPACITOR	4.7MF 20% 25V	
	C 209	QEKJ1EM-475Z	E CAPACITOR	4.7MF 20% 25V	
	C 210	NCB21HK-682X	C CAPACITOR		
	C 211	NCB21HK-152X	C CAPACITOR		
	C 213	NCB21HK-393X	C CAPACITOR		
	C 221	NCS21HJ-331X	C CAPACITOR		
	C 301	QEKJ1AM-107Z	E CAPACITOR	100MF 20% 10V	
	C 302	NCB21HK-393X	C CAPACITOR		
	C 303	QEKJ0JM-227Z	E CAPACITOR	220MF 20% 6.3V	
	C 304	QEKJ1CM-226Z	E CAPACITOR	22MF 20% 16V	
	C 305	QEKJ1CM-226Z	E CAPACITOR	22MF 20% 16V	
	C 306	QEKJ1CM-226Z	E CAPACITOR	22MF 20% 16V	
	C 307	NCB21HK-103X	C CAPACITOR		
	C 308	NCB21HK-152X	C CAPACITOR		
	C 310	NCB21HK-223X	C CAPACITOR		
	C 313	QEKJ1AM-107Z	E CAPACITOR	100MF 20% 10V	
	C 314	QCZ0202-155Z	ML C CAPACITOR	1.5MF	
	C 316	QFG32AJ-223Z	PP CAPACITOR	.022MF 5% 100V	
	C 319	QFLM1HJ-472Z	M CAPACITOR	4700PF 5% 50V	
	C 331	QEKJ1CM-476Z	E CAPACITOR	47MF 20% 16V	
	C 371	QEKJ1EM-475Z	E CAPACITOR	4.7MF 20% 25V	
	C 374	QEKJ1AM-107Z	E CAPACITOR	100MF 20% 10V	
	C 376	NCB21HK-103X	C CAPACITOR		
	CN 31	QGF1205F1-06	CONNECTOR	PRI/HEAD	
	CN 32	QGB2011M1-10	B TO B CONNECTO	PRI/MECHA	
	CN 33	QGF1205F1-09	CONNECTOR	PRI/MICON	
	CN 34	QGF1201F3-10	CONNECTOR	PRI/AMP	
	D 375	MA3051/M/-X	Z DIODE		
	FW 31	QUM024-06A2Z3	PARA RIBON WIRE		
	IC 31	BA3126N	IC	HEAD SW	
	IC 32	AN7317	IC	PB&REC	
	IC 33	BU4094BCF-X	IC		
	L 301	QQR1292-001	BIAS COIL		
	L 303	QQL244K-100Z	INDUCTOR		
	Q 302	KTC3203/Y/-T	TRANSISTOR	OSC	
	Q 305	KTC3203/Y/-T	TRANSISTOR	SW	
	Q 321	UN2213-X	TRANSISTOR	BUFFER	
	Q 371	KTA1271/OY/-T	TRANSISTOR	MOTER+B	
	Q 372	UN2212-X	TRANSISTOR		
	Q 375	2SB562/C/-T	TRANSISTOR	SOLENOID DRIVE	
	Q 376	2SD601A/QR/-X	TRANSISTOR		
	R 101	NRSA63J-220X	MG RESISTOR		
	R 102	NRSA63J-182X	MG RESISTOR		
	R 103	NRSA63J-242X	MG RESISTOR		
	R 104	NRSA63J-122X	MG RESISTOR		
	R 105	NRSA63J-104X	MG RESISTOR		
	R 106	NRSA63J-332X	MG RESISTOR		
	R 107	NRSA63J-123X	MG RESISTOR		
	R 108	NRSA63J-562X	MG RESISTOR		
	R 109	NRSA63J-102X	MG RESISTOR		
	R 110	NRSA63J-272X	MG RESISTOR		
	R 111	NRSA63J-363X	MG RESISTOR		
	R 112	NRSA63J-222X	MG RESISTOR		
	R 116	NRSA63J-102X	MG RESISTOR		
	R 121	NRSA63J-153X	MG RESISTOR		
	R 122	NRSA63J-102X	MG RESISTOR		
	R 201	NRSA63J-220X	MG RESISTOR		
	R 202	NRSA63J-182X	MG RESISTOR		
	R 203	NRSA63J-242X	MG RESISTOR		
	R 204	NRSA63J-122X	MG RESISTOR		
	R 205	NRSA63J-104X	MG RESISTOR		
	R 206	NRSA63J-332X	MG RESISTOR		
	R 207	NRSA63J-123X	MG RESISTOR		
	R 208	NRSA63J-562X	MG RESISTOR		
	R 209	NRSA63J-102X	MG RESISTOR		
	R 210	NRSA63J-272X	MG RESISTOR		
	R 211	NRSA63J-363X	MG RESISTOR		
	R 212	NRSA63J-222X	MG RESISTOR		
	R 216	NRSA63J-102X	MG RESISTOR		
	R 221	NRSA63J-153X	MG RESISTOR		
	R 222	NRSA63J-102X	MG RESISTOR		
	R 301	NRS181J-221X	MG RESISTOR		
	R 303	NRSA63J-393X	MG RESISTOR		
	R 304	NRS181J-101X	MG RESISTOR		
	R 310	QRJ146J-4R7X	UNF C RESISTOR	4.7 5% 1/4W	
	R 313	NRSA63J-2R2X	MG RESISTOR		
	R 314	NRSA63J-153X	MG RESISTOR		
	R 315	NRSA63J-101X	MG RESISTOR		
	R 327	NRSA63J-474X	MG RESISTOR		
	R 335	NRSA63J-152X	MG RESISTOR		
	R 336	NRSA63J-472X	MG RESISTOR		
	R 337	NRSA63J-332X	MG RESISTOR		
	R 338	NRSA63J-392X	MG RESISTOR		
	R 339	NRSA63J-222X	MG RESISTOR		
	R 340	NRS181J-391X	MG RESISTOR		
	R 341	NRSA63J-123X	MG RESISTOR		
	R 342	NRSA63J-203X	MG RESISTOR		
	R 343	NRSA63J-183X	MG RESISTOR		
⚠	R 353	QRJ146J-100X	UNF C RESISTOR	10 5% 1/4W	
	R 371	NRSA63J-123X	MG RESISTOR		
	R 372	NRSA63J-102X	MG RESISTOR		
	R 375	NRSA02J-151X	MG RESISTOR	1/8W	
	R 376	NRSA63J-472X	MG RESISTOR		
	VR 31	QVP0008-203Z	SEMI V RESISTOR	BIAS ADJ	
	VR 37	QVP0008-103Z	SEMI V RESISTOR	TAPE SPEED ADJ	

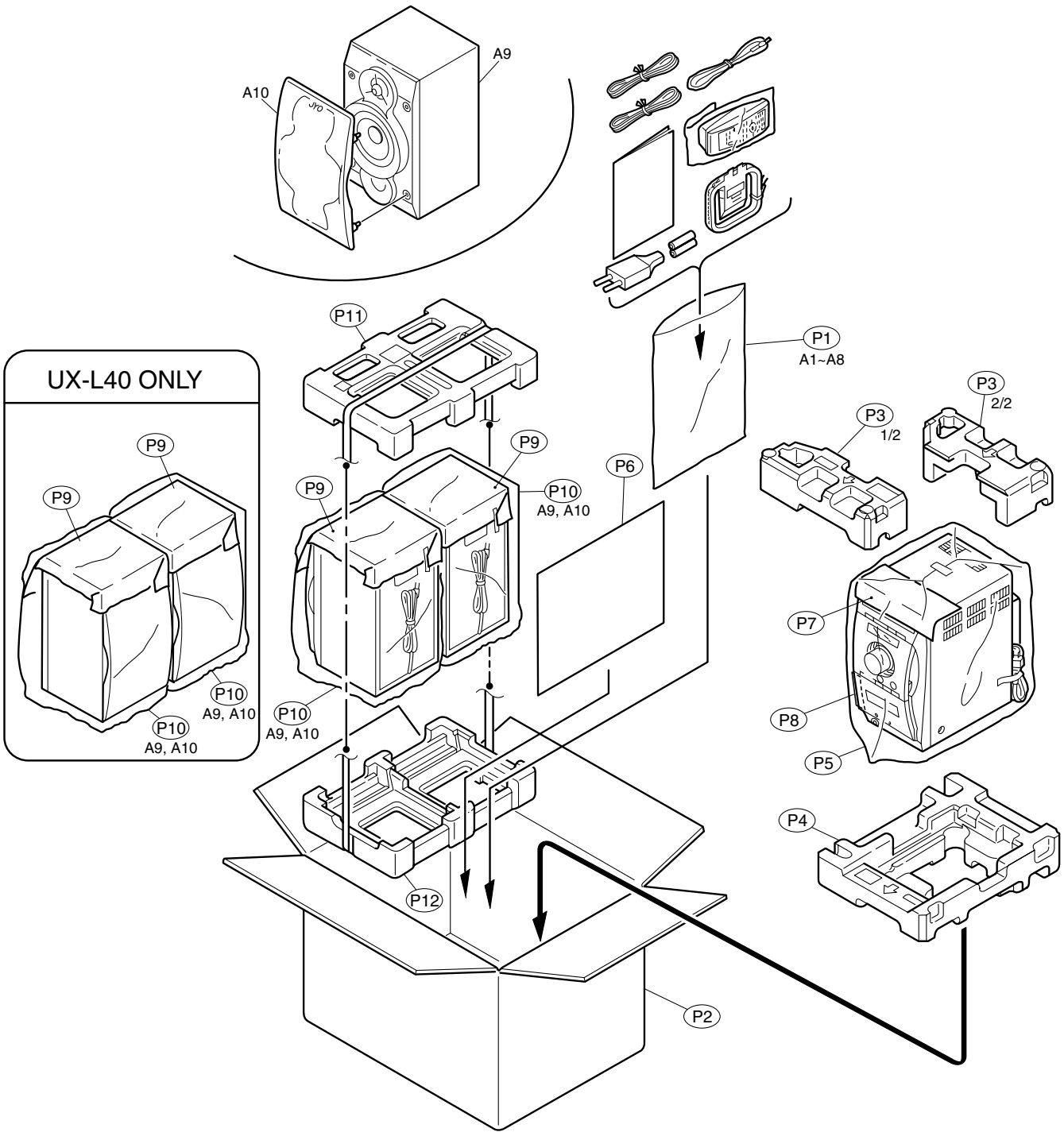
■ **Electrical parts list (Cassette switch board)** **Block No. 06**

⚠	Item	Parts number	Parts name	Remarks	Area
	CN 1	QGB2011L1-10	B TO B CONNECTO		
	D 1	1T3-T2	SI DIODE		
	IC 1	SG-105F3-BB,C	PHOTO SENSER		
	P 1	QNZ0104-001	POST PIN		
	SW 1	QSW0832-001	LEAF SWITCH	R.REC	
	SW 2	QSW0832-001	LEAF SWITCH	TAPE	
	SW 5	QSW0832-001	LEAF SWITCH	F.REC	
	SW 6	QSW0859-001	LEVER SWITCH		

< MEMO >

Packing materials and accessories parts list

Block No. M 3 M M
Block No. M 5 M M



■ Parts list (Packing)

Block No. M3MM

⚠	Item	Parts number	Parts name	Q'ty	Description	Area
	P 1	QPC02503515P	POLY BAG	1	FOR INST BOOK	
	P 2	GV20173-002A	PACKING CASE	1	UX-L30	
		GV20174-004A	PACKING CASE	1	UX-L40	
	P 3	GV10107-001A	CUSHION TOP	1	UX-L30	
		GV10116-001A	CUSHION TOP	1	UX-L40	
	P 4	GV10108-001A	CUSHION BOTTOM	1	UX-L30	
		GV10117-001A	CUSHION BOTTOM	1	UX-L40	
	P 5	QPC05006515P	POLY BAG	1	FOR SET	
	P 6	GV40256-002A	CORRUGAT SPACER	1	UX-L40	
	P 7	GV40168-005A	SHEET	1	STICK AT FRONT	
	P 8	GV40341-001A	SPAN	1	CASS DOOR/F.PAN	
	P 9	715-250068-00	MIRAMAT SHEET	2	UX-L40	
		715-250009-00	MIRAMAT SHEET	2	UX-L30	
	P 10	700-120073-10	POLY BAG	2	UX-L40 FOR SPK	
		700-120074-10	POLY BAG	2	UX-L30 FOR SPK	
	P 11	720-TUXL40-00	TOP CUSHION	1	UX-L40	
		720-TUXL30-00	TOP CUSHION	1	UX-L30	
	P 12	720-BUXL30-00	BOTTOM CUSHION	1	UX-L30	
		720-BUXL40-00	BOTTOM CUSHION	1	UX-L40	

■ Parts list (Accessories)

Block No. M5MM

⚠	Item	Parts number	Parts name	Q'ty	Description	Area
	A 1	QAL0014-001	AM LOOP ANT	1		
	A 2	EWP503-001C	ANT.WIRE	1		
	A 3	----------	BATTERY	2		
	A 4	RM-SUXL40U	REMOCON	1	UX-L40	
		RM-SUXL30U	REMOCON	1	UX-L30	
⚠	A 5	QAM0112-001	AC PLUG ADAPTER	1		US,UJ,UW
	A 6	QAM0339-001	SPEAKER CORD	2	UX-L40	
	A 7	GVT0080-003A	INST BOOK	1	ENG, CHI	US,UJ
		GVT0080-013A	INST BOOK	1	ENG, SPA, POR	UW
		GVT0080-004A	INST BOOK	1	KOR	UP
	A 8	BT-56010-1	WARRANTY CARD	1		UP
	A 9	UXL30R-SPBOX	SPK.WITH BOX	2	UX-L30	
		UXL40R-SPBOX	SPK.WITH BOX	2	UX-L40	
	A 10	J201-XL4000T-10	SARAN BOARD	2	UX-L40	
		J201-XL3000C-10	SARAN BOARD	2	UX-L30	